

GenCore version 5.1.6  
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM nucleic - nucleic search, using sw model  
Run on: June 8, 2004, 09:27:48 ; Search time 1574 Seconds  
(without alignments)  
9398.758 Million cell updates/sec  
Title: US-10-024-579-4  
Perfect score: 363  
Sequence: 1 atggttgtagtcacgggggcg.....tagtcctagcagggtattag 363

Scoring table: IDENTITY\_NUC  
Gapop 10.0 , Gapext 1.0  
Searched: 3470272 seqs, 21671516995 residues  
Total number of hits satisfying chosen parameters: 6940544  
Minimum DB seq length: 0  
Maximum DB seq length: 2000000000  
Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : GenEmbl:  
1: gb.ba.\*  
2: gb.htg.\*  
3: gb.in.\*  
4: gb.om.\*  
5: gb.ov.\*  
6: gb.pat.\*  
7: gb.ph.\*  
8: gb.pl.\*  
9: gb.pr.\*  
10: gb.ro.\*  
11: gb.scs.\*  
12: gb.sy.\*  
13: gb.un.\*  
14: gb.vi.\*  
15: em.ba.\*  
16: em.fun.\*  
17: em.hum.\*  
18: em.in.\*  
19: em.mu.\*  
20: em.on.\*  
21: em.or.\*  
22: em.ov.\*  
23: em.pat.\*  
24: em.ph.\*  
25: em.pl.\*  
26: em.ro.\*  
27: em.sts.\*  
28: em.un.\*  
29: em.vi.\*  
30: em.htg.hum.\*  
31: em.htg.inv.\*  
32: em.htg.other.\*  
33: em.htg.mus.\*  
34: em.htg.pln.\*  
35: em.htg.rod.\*  
36: em.htg.wat.\*  
37: em.htg.vrt.\*  
38: em.sy.\*  
39: em.htgo.hum.\*  
40: em.htgo.mus.\*  
41: em.htgo.other.\*

Pred. No. is the number of results predicted by chance to have a

score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	363	100.0	363	6	AX575786 Sequence
2	363	100.0	680	6	AX575790 Sequence
3	316.8	87.3	1124	6	BD275557 MOLECULES
4	316.8	87.3	1211	9	BC042482 Homo sapi
5	316.8	87.3	2576	6	AX714361 Sequence
6	316.8	87.3	2576	9	AK056631 Homo sapi
7	315.2	86.8	4807	6	BD183414 Novel gen
C 8	221.8	61.1	135044	9	AC006001 Homo sapi
9	220.2	60.7	321	6	AX575788 Sequence
10	218.6	60.2	194464	2	AC146119 Pan trogl
11	203.8	56.1	246	6	AX887431 Sequence
12	203.8	56.1	246	6	BD027041 Sequence
13	184.2	50.7	3864	9	AB056802 Macaca fa
C 14	163	44.9	213729	2	AC116246 Rattus no
15	163	44.9	216180	2	AC119707 Rattus no
C 16	155	42.7	203685	10	AC122339 Mus muscu
17	145.2	40.0	4143	9	AK127790 Homo sapi
18	110.6	30.5	188908	5	AL935293 Zebrafish
C 19	106.4	29.3	188791	10	AC117185 Mus muscu
C 20	106.4	29.3	257003	10	AC122830 Mus muscu
C 21	65.8	18.1	96119	2	AC110531 Mus muscu
22	65.2	18.0	204095	2	EX649457 Danio rer
C 23	63.2	17.4	182334	2	EX005483 Danio rer
C 24	61.8	17.0	1568	9	BC062331 Homo sapi
25	61.8	17.0	3146	9	AK095233 Homo sapi
26	61.8	17.0	3343	6	AX230565 Sequence
C 27	61.8	17.0	33602	9	U73643 Human Chrom
C 28	61.8	17.0	131259	2	AP001805 Homo sapi
C 29	61.8	17.0	189412	2	AC023532 Homo sapi
C 30	61.8	17.0	205152	9	AP002985 Homo sapi
31	61.8	17.0	214701	2	AP001447 Homo sapi
C 32	59.8	16.5	194464	2	AC146119 Pan trogl
33	59.4	16.4	228774	2	AC123186 Rattus no
34	59.4	16.4	264204	2	AC125702 Rattus no
C 35	58.4	16.1	92358	9	AP003032 Homo sapi
36	58.4	16.1	144771	2	AC018610 Homo sapi
37	57.2	15.8	242	6	AX887690 Sequence
38	57.2	15.8	242	6	BD027300 Sequence
39	57.2	15.8	1718	6	AX179743 Sequence
40	57	15.7	1654	9	BC001062 Homo sapi
41	57	15.7	1654	9	BC001929 Homo sapi
42	57	15.7	1696	6	AX685169 Sequence
43	56.4	15.5	421	6	AX774711 Sequence
44	55.8	15.4	3096	10	BC006935 Mus muscu
45	54.2	14.9	96119	2	AC110531 Mus muscu

ALIGNMENTS

RESULT 1  
AX575786  
LOCUS AX575786 363 bp DNA linear PAT 07-JAN-2003  
DEFINITION Sequence 4 from Patent WO02068626.  
ACCESSION AX575786  
VERSION AX575786.1 GI:27552274  
KEYWORDS  
SOURCE Homo sapiens (human)  
ORGANISM Homo sapiens  
Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
REFERENCE  
1 Friddle, C.J., Gerhardt, B., Hilbun, E. and Turner, C.A.  
AUTHORS Novel human ion channel-related proteins and polynucleotides  
TITLE encoding the same

JOURNAL Patent: WO 0206826-A 4 06-SEP-2002;  
Lexicon Genetics Incorporated (US)

## FEATURES

source  
1..363  
/organism="Homo sapiens"  
/mol\_type="unassigned DNA"  
/db\_xref="taxon:9606"

## ORIGIN

Query Match 100.0%; Score 363; DB 6; Length 363;  
Best Local Similarity 100.0%; Pred. No. 3.3e-72;  
Matches 363; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGTGGTAGTCACGGGGGGAGCCAGACAGCCGTCGTTCAGGACGGTGCATGTCACG 60

DB 1 ATGGTGGTAGTCACGGGGGGAGCCAGACAGCCGTCGTTCAGGACGGTGCATGTCACG 60

QY 61 TCTGAGCCGAGACGACATTTCTGAGAGCGGCGACAGCCGACGAGGCGGGGCGAC 120

DB 61 TCTGAGCCGAGACGACATTTCTGAGAGCGGCGACAGCCGACGAGGCGGGGCGAC 120

QY 121 GCCTGCGCCCTGCTGCCACAGGAGTTTCCTGAGGTTTCCCTTAACTATCGAGGGGCT 180

DB 121 GCCTGCGCCCTGCTGCCACAGGAGTTTCCTGAGGTTTCCCTTAACTATCGAGGGGCT 180

QY 181 CACTTCACTACAGCCTGTCACACTCGGCTGCTACGACACACCATGTTGGCAGCCATG 240

DB 181 CACTTCACTACAGCCTGTCACACTCGGCTGCTACGACACACCATGTTGGCAGCCATG 240

QY 241 TTCAGTGGGGGCGACTACATCCCGACGACTCCGAGGCGCGGTACTTCATCGACCGAGAT 300

DB 241 TTCAGTGGGGGCGACTACATCCCGACGACTCCGAGGCGCGGTACTTCATCGACCGAGAT 300

QY 301 GGACACACTTTGGGTATGTCCTCCCTACATCAATCACTTTGTAGTCTCTAGCAGTGAT 360

DB 301 GGACACACTTTGGGTATGTCCTCCCTACATCAATCACTTTGTAGTCTCTAGCAGTGAT 360

QY 361 TAG 363

DB 361 TAG 363

## RESULT 2

AX575790 680 bp DNA linear PAT 07-JAN-2003  
LOCUS Sequence 8 from Patent WO0206826.  
ACCESSION AX575790  
VERSION AX575790.1 GI:27552276

KEYWORDS

SOURCE Homo sapiens (human)

## ORGANISM

Homo sapiens  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

## REFERENCE

1 Friddle,C.J., Gerhardt,B., Hilbun,E. and Turner,C.A.

Novel human ion channel-related proteins and polynucleotides

encoding the same

Patent: WO 0206826-A 8 06-SEP-2002;

Lexicon Genetics Incorporated (US)

## JOURNAL

Location/Qualifiers

## FEATURES

source  
1..680

/organism="Homo sapiens"

/mol\_type="unassigned DNA"

/db\_xref="taxon:9606"

## ORIGIN

Query Match 100.0%; Score 363; DB 6; Length 680;  
Best Local Similarity 100.0%; Pred. No. 3.1e-72;  
Matches 363; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGTGGTAGTCACGGGGGGAGCCAGACAGCCGTCGTTCAGGACGGTGCATGTCACG 60

DB 198 ATGGTGGTAGTCACGGGGGGAGCCAGACAGCCGTCGTTCAGGACGGTGCATGTCACG 257

QY 61 TCTGAGCCGAGACGACATTTCTGAGAGCGGCGACAGCCGACGAGGCGGGGCGAC 120

DB 258 TCTGAGCCGAGACGACATTTCTGAGAGCGGCGACAGCCGACGAGGCGGGGCGAC 317

QY 121 GGCCTGCCCCCTGCTGCCACAGGAGTTTCTGAGGTTTCCCTTAACTATCGAGGGGCT 180

DB 318 GGCCTGCCCCCTGCTGCCACAGGAGTTTCTGAGGTTTCCCTTAACTATCGAGGGGCT 377

QY 181 CACTTCACTACAGCCTGTCACACTCGGCTGCTACGACACACCATGTTGGCAGCCATG 240

DB 378 CACTTCACTACAGCCTGTCACACTCGGCTGCTACGACACACCATGTTGGCAGCCATG 437

QY 241 TTCAGTGGGGGCGACTACATCCCGACGACTCCGAGGCGCGGTACTTCATCGACCGAGAT 300

DB 438 TTCAGTGGGGGCGACTACATCCCGACGACTCCGAGGCGCGGTACTTCATCGACCGAGAT 497

QY 301 GGACACACTTTGGGTATGTCCTCCCTACATCAATCACTTTGTAGTCTCTAGCAGTGAT 360

DB 498 GGACACACTTTGGGTATGTCCTCCCTACATCAATCACTTTGTAGTCTCTAGCAGTGAT 557

QY 361 TAG 363

DB 558 TAG 560

## RESULT 3

BD275557 1124 bp DNA linear PAT 17-JUL-2003  
LOCUS MOLECULES OF THE IMMUNE SYSTEM.  
DEFINITION BD275557

ACCESSION BD275557.1 GI:33085325

VERSION JP 2002540791-A/2.

KEYWORDS Homo sapiens (human)

SOURCE

ORGANISM

Homo sapiens  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 1124)

Lu,D.A.M., Azimzal,Y., Baughn,M.R., Tang,T.Y., Lal,P. and Yue,H.

MOLECULES OF THE IMMUNE SYSTEM

Patent: JP 2002540791-A 2 03-DEC-2002;

INCYTE PHARMACEUTICALS INC, Henry YUE, Preeti LAL, Tom Y TANG, Mariah

R BAUGHN, Yalda AZIMZAI, Dyung Aina M LU

OS Homo sapiens

PN JP 2002540791-A/2

PD 03-DEC-2002

PF 04-APR-2000 JP 2000609571

PR 05-MAY-1999 US 60/132647,05-APR-1999 US 60/127852 PI

dyung yue, yalda azimzal, mariah l baughn, tom y tang, pi

preeti lal, yue

PI Henry yue

CC This description about <220> can't be interpreted CC <220>

CC <221> misc feature

CC <223> Incyte ID No.: 2751129CB1

PH Key Location/Qualifiers.

## FEATURES

source

1..1124

/organism="Homo sapiens"

/mol\_type="genomic DNA"

/db\_xref="taxon:9606"

## ORIGIN

Query Match 87.3%; Score 316.8; DB 6; Length 1124;  
Best Local Similarity 99.4%; Pred. No. 9e-62;  
Matches 318; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 ATGGTGGTAGTCACGGGGGGAGCCAGACAGCCGTCGTTCAGGACGGTGCATGTCACG 60

DB 28 ATGGTGGTAGTCACGGGGGGAGCCAGACAGCCGTCGTTCAGGACGGTGCATGTCACG 87

QY 61 TCTGAGCCGAGACGACATTTCTGAGAGCGGCGACAGCCGACGAGGCGGGGCGAC 120

DB 88 TCTGAGCCGAGACGACATTTCTGAGAGCGGCGACAGCCGACGAGGCGGGGCGAC 147



RESULT 5  
 LOCUS AX714361 2576 bp DNA linear PAT 15-APR-2003  
 DEFINITION Sequence 1045 from Patent EP1293569.  
 ACCESSION AX714361  
 VERSION AX714361.1 GI:29889313  
 KEYWORDS Homo sapiens (human)  
 SOURCE Homo sapiens  
 ORGANISM Homo sapiens  
 BUKARYOTA; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Euthera; Primates; Catarrhini; Homnidae; Homo.  
 REFERENCE 1  
 AUTHORS Iisogai, T., Sugiyama, T., Otsuki, T., Wakamatsu, A., Sato, H., Ishii, S., Yamamoto, J. I., Isono, Y., Hio, Y., Otsuka, K., Nagai, K., Irie, R., Tamechika, I., Seki, N., Yoshikawa, T., Otsuka, M., Nagahari, K. and Masuho, Y.  
 TITLE Full-length cDNAs  
 JOURNAL Patent: EP 1293569-A 1045 19-MAR-2003;  
 Helix Research Institute (JP); Research Association for Biotechnology (JP)  
 FEATURES  
 Location/Qualifiers  
 1..2576  
 /organism="Homo sapiens"  
 /mol\_type="unassigned DNA"  
 /db\_xref="taxon:9606"  
 ORIGIN  
 Query Match 87.3%; Score 316.8; DB 6; Length 2576;  
 Best Local Similarity 99.4%; Pred. No. 8.3e-62;  
 Matches 318; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 1 ATGGTGATGATCGCGGGCGGAGCCAGACAGCGCGTGTGACGACGGTGCATGTCAGC 60  
 Db 108 ATGGTGATGATCGCGGGCGGAGCCAGACAGCGCGTGTGACGACGGTGCATGTCAGC 167  
 QY 61 TCTGAGCCCGAGACAGCATTTCTGAGCGCGCCAGACGCGCGCCAGCGAGCGGGGCAC 120  
 Db 168 TCTGAGCCCGAGACAGCATTTCTGAGCGCGCCAGACGCGCGCCAGCGAGCGGGGCAC 227  
 QY 121 GCGTGCCTCGTGTGACAGGAGTTCTGAGGTTGTTCCCTTAACTACATCGAGGGGCT 180  
 Db 228 GCGTGCCTCGTGTGACAGGAGTTCTGAGGTTGTTCCCTTAACTACATCGAGGGGCT 287  
 QY 181 CACTTCACTACACGCTGTCCACACTGCGGTGCTACGAGACACCATGTTGGCAGCCATG 240  
 Db 288 CACTTCACTACACGCTGTCCACACTGCGGTGCTACGAGACACCATGTTGGCAGCCATG 347  
 QY 241 TTCAGTGGCGGCACTACATCCCGAGGAGTCCGAGGGCGGCTACTTCAATCGACCGAGAT 300  
 Db 348 TTCAGTGGCGGCACTACATCCCGAGGAGTCCGAGGGCGGCTACTTCAATCGACCGAGAT 407  
 QY 301 GGCACACACTTTGGAGATGT 320  
 Db 408 GGCACACACTTTGGAGATGT 427  
 RESULT 6  
 LOCUS AK056631 2576 bp mRNA linear PRI 01-AUG-2002  
 DEFINITION Homo sapiens cDNA FLJ2069 fis, clone OCBF1000118, weakly similar to TUMOR NECROSIS FACTOR, ALPHA-INDUCED PROTEIN 1, ENDOTHELIAL.  
 ACCESSION AK056631  
 VERSION AK056631.1 GI:16552086  
 KEYWORDS oligo capping; fis (full insert sequence).  
 SOURCE Homo sapiens (human)  
 ORGANISM Homo sapiens  
 BUKARYOTA; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Euthera; Primates; Catarrhini; Homnidae; Homo.  
 REFERENCE 1  
 AUTHORS Oshima, A., Takahashi-Fujii, A., Tanase, T., Imose, N., Takeuchi, K., Arita, M., Musashino, K., Yuuki, H., Hara, H., Sugiyama, T., Irie, R., Otsuki, T., Sato, H., Ota, T., Wakamatsu, A., Ishii, S., Yamamoto, J.,

Isono, Y., Kawai-Hio, Y., Saito, K., Nishikawa, T., Kimura, K., Yamashita, H., Matsuo, K., Nakamura, Y., Sekine, M., Kikuchi, H., Kanda, K., Wagatsuma, M., Murakawa, K., Kanehori, K., Sugiyama, A., Kawakami, B., Suzuki, Y., Sugano, S., Nagahari, K., Masuho, Y., Nagai, K. and Iisogai, T.  
 NEDO human cDNA sequencing project  
 Unpublished  
 REFERENCES 2 (bases 1 to 2576)  
 AUTHORS Iisogai, T., Otsuki, T. and Sugiyama, T.  
 TITLE Direct Submission  
 JOURNAL Submitted (24-OCT-2001) Takao Iisogai, Helix Research Institute, Genomics Laboratory; 1532-3 Yana, Kisarazu, Chiba 292-0812, Japan (E-mail: genomics@hri.co.jp, Tel: 81-438-52-3975, Fax: 81-438-52-3986)  
 COMMENT NEDO human cDNA sequencing project supported by Ministry of Economy, Trade and Industry of Japan; cDNA full insert sequencing: Research Association for Biotechnology (RAB); cDNA library construction: Helix Research Institute (HRI) (supported by Japan Key Technology Center etc.); 5'- & 3'-end one pass sequencing: RAB, HRI, and Biotechnology Center, National Institute of Technology and Evaluation; clone selection for full insert sequencing: RAB and HRI.

## FEATURES

## Location/Qualifiers

1..2576  
 /organism="Homo sapiens"  
 /mol\_type="mRNA"  
 /db\_xref="taxon:9606"  
 /clone="OCBF1000118"  
 /tissue\_type="brain"  
 /clone\_lib="OCBF1"  
 /dev\_stage="fetus"  
 /note="cloning vector: pME18SFL3"  
 108..977  
 /note="unnamed protein product"  
 /codon\_start=1  
 /protein\_id="BAB71236.1"  
 /db\_xref="GI:16552087"  
 /translation="MVVTGTRPDSRRDQGMSSDABDDFLPATPTATQAGHALPL  
 LPQEPVPLNIGAGHTFLSTLCYEDTTLAAMPGRHYIPTDSERYIDRDGT  
 HPQDVLNPLGDLPPRRVAVYKQAVYAIQPLLENNQPLKGRVROAFLGLM  
 FVKDLHSLIVRIAELEAVQKARPAKVKVFEKEMPTTPYECPLLSLRVERSED  
 GYGFHEHGVDSVFGFWEAVADVLLHCLVTLDSAQSLTVDHQCIGVCDRLVNHY  
 CKRPIYEFATYWW"

## CDS

## ORIGIN

Query Match 87.3%; Score 316.8; DB 9; Length 2576;  
 Best Local Similarity 99.4%; Pred. No. 8.3e-62;  
 Matches 318; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 1 ATGGTGATGATCGCGGGCGGAGCCAGACAGCGCTGTGACGACGGTGCATGTCAGC 60  
 Db 108 ATGGTGATGATCGCGGGCGGAGCCAGACAGCGCTGTGACGACGGTGCATGTCAGC 167  
 QY 61 TCTGAGCCCGAGACAGCATTTCTGAGCGCGCCAGACGCGCGCCAGCGAGCGGGGCAC 120  
 Db 168 TCTGAGCCCGAGACAGCATTTCTGAGCGCGCCAGACGCGCGCCAGCGAGCGGGGCAC 227  
 QY 121 GCGTGCCTCGTGTGACAGGAGTTCTGAGGTTGTTCCCTTAACTACATCGAGGGGCT 180  
 Db 228 GCGTGCCTCGTGTGACAGGAGTTCTGAGGTTGTTCCCTTAACTACATCGAGGGGCT 287  
 QY 181 CACTTCACTACACGCTGTCCACACTGCGGTGCTACGAGACACCATGTTGGCAGCCATG 240  
 Db 288 CACTTCACTACACGCTGTCCACACTGCGGTGCTACGAGACACCATGTTGGCAGCCATG 347  
 QY 241 TTCAGTGGCGGCACTACATCCCGAGGAGTCCGAGGGCGGCTACTTCAATCGACCGAGAT 300  
 Db 348 TTCAGTGGCGGCACTACATCCCGAGGAGTCCGAGGGCGGCTACTTCAATCGACCGAGAT 407  
 QY 301 GGCACACACTTTGGAGATGT 320  
 Db 408 GGCACACACTTTGGAGATGT 427

```

RESULT 7
BD183414
LOCUS BD183414 4807 bp DNA linear PAT 17-JUN-2003
DEFINITION Novel genes and proteins encoded by the genes.
ACCESSION BD183414
VERSION BD183414.1 GI:31875614
KEYWORDS JP 2002345492-A/127.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
AUTHORS Chara,O., Negase,T. and Nakajima,D.
TITLE Novel genes and proteins encoded by the genes
JOURNAL Patent: JP 2002345492-A 127 03-DEC-2002;
KAZUSA DNA RESEARCH INSTITUTE
COMMENT OS Homo sapiens (human)
PN JP 2002345492-A/127
PD 03-DEC-2002
PF 26-FEB-2002 JP 2002049009
PI OSAMU CHARA, TAKAHIRO NAGASE, DAISUKE NAKAJIMA
PC C12N15/09, C07K14/47//A61K31/711, A61K38/00, A61P25/00,
PC A61P25/14,
PC A61P25/18, A61P35/00, C12N15/00, A61K37/02
CC Novel genes and proteins encoded by the genes FH Key
CDS Location/Qualifiers
FT CDS Location/Qualifiers
source 1..4807
/organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"

ORIGIN
Query Match 86.8%; Score 315.2; DB 6; Length 4807;
Best Local Similarity 99.1%; Pred. No. 1.8e-61;
Matches 317; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1 ATGTGTTAGTCACGGGGGCGGAGCCGACAGCGTGTCTAGGACGCTGTCATGTCAGC 60
Dy 123 ATGTGTTAGTCACGGGGGCGGAGCCGACAGCGTGTCTAGGACGCTGTCATGTCAGC 182
Qy 61 TCTGACGCGGAGACGACTTCTGGAGCGGCGCCAGCGCCAGCGCGGCGGCGAC 120
Dy 183 TCTGACGCGGAGACGACTTCTGGAGCGGCGCCAGCGCCAGCGCGGCGGCGAC 242
Qy 121 GCGTGGCCCTGCTGCGACAGAGATTCTCTAGGTTGTTCCCTTACATCGAGGGGCT 180
Dy 243 GCGTGGCCCTGCTGCGACAGAGATTCTCTAGGTTGTTCCCTTACATCGAGGGGCT 302
Qy 181 CACTTCACTACACGCTGTCCACACTGGGTGTACGAGACACACATGTTGGCAGCCATG 240
Dy 303 CACTTCACTACACGCTGTCCACACTGGGTGTACGAGACACACATGTTGGCAGCCATG 362
Qy 241 TTCAGTGGCGGCGACTACATCCCAAGAGCTCCGAGGCGCGGTACTTCAATCGACCGAGAT 300
Dy 363 TTCAGTGGCGGCGACTACATCCCAAGAGCTCCGAGGCGCGGTACTTCAATCGACCGAGAT 422
Qy 301 GGCACACACTTTGGTATGT 320
Dy 423 GGCACACACTTTGGATGT 442

RESULT 8
AC006001/c
LOCUS AC006001 135044 bp DNA linear PRI 02-OCT-2003
DEFINITION Homo sapiens PAC clone RP4-756H11 from 7, complete sequence.
ACCESSION AC006001
VERSION AC006001.2 GI:5708496
KEYWORDS HTG.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

```

```

REFERENCE
AUTHORS Lamar,B., Le,T. and Wohldmann,P.
TITLE The sequence of Homo sapiens PAC clone RP4-756H11
JOURNAL Unpublished (2001)
MEDLINE 95063792
PUBMED 9647074
REFERENCE
AUTHORS Waterston,R.H.
TITLE Direct Submission
JOURNAL Submitted (22-NOV-1998) Genome Sequencing Center, Washington
University School of Medicine, 4444 Forest Park Parkway, St. Louis,
MO 63108, USA
REFERENCE
AUTHORS Waterston,R.H.
TITLE Direct Submission
JOURNAL Submitted (07-AUG-1999) Genome Sequencing Center, Washington
University School of Medicine, 4444 Forest Park Parkway, St. Louis,
MO 63108, USA
REFERENCE
AUTHORS Waterston,R.
TITLE Direct Submission
JOURNAL Submitted (30-SEP-2000) Department of Genetics, Washington
University, 4444 Forest Park Avenue, St. Louis, Missouri 63108, USA
REFERENCE
AUTHORS Waterston,R.
TITLE Direct Submission
JOURNAL Submitted (26-APR-2003) Department of Genetics, Washington
University, 4444 Forest Park Avenue, St. Louis, Missouri 63108, USA
REFERENCE
AUTHORS Wilson,R.
TITLE Direct Submission
JOURNAL Submitted (02-OCT-2003) Department of Genetics, Washington
University, 4444 Forest Park Avenue, St. Louis, Missouri 63108, USA
On Aug 8, 1999 this sequence version replaced gi:3907522.
----- Genome Center
Center: Washington University Genome Sequencing Center
Center code: WUGSC
Web site: http://genome.wustl.edu
Contact: sapiens@wustl.edu
----- Summary Statistics
-----
Center project name: H_DJ0756H11
-----

```

NOTICE: This sequence may not represent the entire insert of this clone. It may be shorter because we only sequence overlapping clone sections once, or longer because we provide a small overlap between neighboring data submissions.

This sequence was finished as follows unless otherwise noted: all regions were double stranded, sequenced with an alternate chemistry, or covered by high quality data (i.e., phred quality >= 30); an attempt was made to resolve all sequencing problems, such as compressions and repeats; all regions were covered by sequence from more than one subclone; and the assembly was confirmed by restriction digest.

#### MAPPING INFORMATION:

The sequence of this clone was established as part of a mapping and sequencing collaboration between the NHGRI Chromosome 7 Mapping Project (Eric D. Green, Director), John D. McPherson in the Department of Genetics (Washington University), and the Washington University Genome Sequencing Center. For additional information about the map position of this sequence, see <http://www.nhgri.nih.gov/DIR/GRB/CHR7>, send mailto:egreen@nhgri.nih.gov, or see <http://genome.wustl.edu>

#### SOURCE INFORMATION:

This clone was derived from human PAC library RPCI-4, prepared by

Pieter de Jong and coworkers at <http://www.chori.org> using the method described by Ioannou et al., Nature Genetics 6:84-9 (1994). The library is from one male donor. The clone may be obtained either from Genome Systems, Inc. (<http://www.genomesystems.com>) or Research Genetics, Inc. (<http://www.resgen.com>); or from Pieter de Jong. VECTOR: pCYPAC2

## NEIGHBORING SEQUENCE INFORMATION:

Actual start of this clone is at base position 1 of RP4-756H11  
Actual end is at base position 135044 of RP4-756H11.

## FEATURES

source  
Location/Qualifiers  
1. .135044  
/organism="Homo sapiens"  
/mol\_type="Genomic DNA"  
/db\_xref="taxon:9606"  
/chromosome="7"  
/map="7"  
/clone="RP4-756H11"  
/clone\_lib="RPCI-4"  
59. .349  
/rpt\_family="Alu"  
369. .488  
/rpt\_family="ERV1"  
494. .800  
/rpt\_family="Alu"  
835. .1030  
/rpt\_family="L2"  
1357. .1436  
/rpt\_family="Alu"  
1523. .1828  
/rpt\_family="Alu"  
2038. .2314  
/rpt\_family="Alu"  
2328. .2631  
/rpt\_family="Alu"  
2686. .2781  
/rpt\_family="Alu"  
2785. .2927  
/rpt\_family="L1"  
2937. .2973  
/rpt\_family="L1"  
2974. .3228  
/rpt\_family="L1"  
3229. .3516  
/rpt\_family="Alu"  
3517. .3546  
/rpt\_family="L1"  
3547. .3793  
/rpt\_family="MER2\_type"  
3794. .3823  
/rpt\_family="L1"  
3824. .4073  
/rpt\_family="Alu"  
4074. .4144  
/rpt\_family="L1"  
4156. .4643  
/rpt\_family="L1"  
4657. .4887  
/rpt\_family="Alu"  
4895. .5060  
/rpt\_family="MIR"  
5162. .5624  
/rpt\_family="L1"  
5625. .5919  
/rpt\_family="Alu"  
5920. .6087  
/rpt\_family="L1"  
6214. .6370  
/rpt\_family="Alu"  
6492. .6700  
/rpt\_family="MIR"  
7521. .7616

repeat\_region  
/rpt\_family="MIR"  
7652. .7971  
/rpt\_family="Alu"  
8017. .8294  
/rpt\_family="Alu"  
8298. .8437  
/rpt\_family="Alu"  
8769. .8930  
/rpt\_family="Alu"  
8972. .9065  
/rpt\_family="Alu"  
9079. .9126  
/rpt\_family="(TA)n"  
9187. .9229  
/rpt\_family="(TG)n"  
9230. .9250  
/rpt\_family="AT-rich"  
9251. .9549  
/rpt\_family="Alu"  
9550. .9572  
/rpt\_family="AT-rich"  
9648. .9678  
/rpt\_family="(A)n"  
9750. .9791  
/rpt\_family="Alu"  
9808. .10423  
/rpt\_family="L2"  
11152. .11226  
/rpt\_family="MIR"  
11716. .12011  
/rpt\_family="Alu"  
12015. .12333  
/rpt\_family="Alu"  
12465. .12583  
/rpt\_family="MIR"  
13722. .13853  
/rpt\_family="MER1\_type"  
14062. .14287  
/rpt\_family="L2"  
14461. .14592  
/rpt\_family="MIR"  
14669. .14965  
/rpt\_family="Alu"  
15509. .15814  
/rpt\_family="Alu"  
15827. .16007

Query Match 61.1%; Score 221.8; DB 9; Length 135044;

Best Local Similarity 86.8%; Pred. No. 2e-40; Mismatches 0; Gaps 0;  
Matches 244; Conservative 0; Indels 37;

QY 83 TGGAGCGCGCCACGCGCGCCAGCTCTCAATCCCGCTGCTGAGAGCCCTGGTATTTCTTCC 46840  
DB 46899 TGGAGCAGCCCGCCAGCTCTCAATCCCGCTGCTGAGAGCCCTGGTATTTCTTCC 46840  
QY 143 AGTTTCCTGAGGTTTCCCTTAACATCGAGGGGCTCACTTCACTACAGCGCTGCCA 202  
DB 46839 AGTTTCCTGAGGTTTCCCTTAACATCGAGGGGCTCACTTCACTACAGCGCTGCCA 46780  
QY 203 CACTGCGGTCTACGAGACACCATGTTGGCAGCCATGTTCACTGCGGGCGGCATCATCC 262  
DB 46779 CACTGCGGTCTACGAGACACCATGTTGGCAGCCATGTTCACTGCGGGCGGCATCATCC 46720  
QY 263 CACCGGACTCCGAGGGCGGCTACTTCATCGACCGAGATGGCAGACACTTTGGGTATGCT 322  
DB 46719 CACCGGACTCCGAGGGCGGCTACTTCATCGACCGAGATGGCAGACACTTTGGGTATGCT 46660  
QY 323 CTCCCTCTACATCAACTTTGTAGTCTTAGTCTTAGTCTTAGTCTTAGTCTTAGTCTTAG 363  
DB 46659 CTCCCTCTACATCAACTTTGTAGTCTTAGTCTTAGTCTTAGTCTTAGTCTTAGTCTTAG 46619

RESULT 9

GenCore version 5.1.6  
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: June 8, 2004, 07:09:53 ; Search time 357 Seconds  
(without alignments)  
4319.596 Million cell updates/sec

Title: US-10-024-579-4

Perfect score: 363

Sequence: 1 atggttgtagtcacggggg.....tagtcttagcagtgattag 363

Scoring table: IDENTITY\_NUC

Gapop 10.0 , Gapext 1.0

Searched: 3373863 seqs, 2124099041 residues

Total number of hits satisfying chosen parameters: 6747726

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

N Geneseq 29Jan04:\*

- 1: Geneseqn1980s:\*
- 2: Geneseqn1990s:\*
- 3: Geneseqn2000s:\*
- 4: Geneseqn2001as:\*
- 5: Geneseqn2001bs:\*
- 6: Geneseqn2002as:\*
- 7: Geneseqn2003as:\*
- 8: Geneseqn2003bs:\*
- 9: Geneseqn2003cs:\*
- 10: Geneseqn2004s:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	363	100.0	680	ABS55072	Human nov
2	316.8	87.3	519	AAH99183	Human pro
3	316.8	87.3	1068	ABX71180	Novel hum
4	316.8	87.3	1124	AAH95776	Human imm
5	316.8	87.3	2576	ADA53477	Human cod
6	221.8	61.1	473	AAI11478	Probe #14
C 7	221.8	61.1	473	AAH53148	Human foe
C 8	221.8	61.1	473	AAH32753	Probe #14
C 9	221.8	61.1	473	ABA42720	Human bre
C 10	221.8	61.1	473	ABA22919	Probe #13
C 11	221.8	61.1	473	AAK26849	Human bon
C 12	221.8	61.1	473	AAK01395	Human bra
C 13	221.8	61.1	473	ABS26442	Human liv
C 14	221.8	61.1	473	AAI01392	Probe #13
C 15	221.8	61.1	473	ABS01448	Human gen
C 16	220.2	60.7	321	ABS55071	Human nov
C 17	203.8	56.1	246	AAC03296	Human sec
C 18	172	47.4	173	AAI20691	Probe #10
C 19	172	47.4	173	AAH65740	Human foe
C 20	172	47.4	173	AAI45906	Probe #14
C 21	172	47.4	173	ABA47847	Human bre
C 22	172	47.4	173	ABA32824	Probe #11
C 23	172	47.4	173	AAK39882	Human bon

C 24	172	47.4	173	4	AAK14142	Human bra
C 25	172	47.4	173	4	ABS39473	Human liv
C 26	172	47.4	173	5	AAI06389	Probe #63
C 27	172	47.4	173	6	ABS13980	Human gen
C 28	93.2	25.7	592	6	ABQ17137	Oligonuc1
C 29	93.2	25.7	592	6	ABQ17136	Oligonuc1
C 30	88	24.2	592	6	ABQ17135	Oligonuc1
C 31	88	24.2	592	6	ABQ17134	Oligonuc1
C 32	66.2	18.2	785	6	ABS77158	Frog embr
C 33	61.8	17.0	484	8	ACH25380	Human adu
C 34	61.8	17.0	592	4	AAI07161	Human rep
C 35	61.8	17.0	592	4	AAI07162	Human rep
C 36	61.8	17.0	592	4	AAI07163	Human rep
C 37	61.8	17.0	1014	4	AAH99818	Human pro
C 38	61.8	17.0	1109	6	ABZ11790	Human pol
C 39	61.8	17.0	3343	4	AAI17473	Human tra
C 40	57.2	15.8	242	3	AAC03555	Human sec
C 41	57.2	15.8	706	5	AAH80555	DNA encod
C 42	57.2	15.8	1718	4	AAI09555	Human tra
C 43	57	15.7	591	4	AAH33332	Human col
C 44	57	15.7	592	3	AAC98096	Human col
C 45	57	15.7	1696	6	ABQ73684	Human pot

## ALIGNMENTS

RESULT 1

ABS55072

ID ABS55072 standard; cDNA; 680 BP.

XX AC ABS55072;

XX XX

XX DT 10-DEC-2002 (first entry)

XX XX

XX DE Human novel membrane protein cDNA #2.

XX XX

XX KM Human; ss; gene; membrane protein; signal transduction; ion channel;

XX KM cancer; arthritis; antiviral; cytostatic; antiarthritic; nutritional;

XX KM cosmetic; SNP; single nucleotide polymorphism.

XX XX

XX OS Homo sapiens.

XX OS

XX FH Key

XX CDS

XX Location/Qualifiers

XX 198..560

XX /tag= a

XX /product= "Membrane protein"

XX /note= "This CDS is specifically claimed in claim 2"

XX replace(231,A)

XX /tag= b

XX /standard\_name= "Single nucleotide polymorphism"

XX replace(295,T)

XX /tag= c

XX /standard\_name= "Single nucleotide polymorphism"

XX replace(432,T)

XX /tag= d

XX /standard\_name= "Single nucleotide polymorphism"

XX US2002119522-A1.

XX 29-AUG-2002.

XX 18-DEC-2001; 2001US-00024579.

XX 28-DEC-2000; 2000US-0258595P.

XX (FRID/) FRIDDLE C J.

XX (GERH/) GERHARDT B.

XX (HILB/) HILBUN E.

XX (TURN/) TURNER C A.

XX Priddle CJ, Gerhardt B, Hilbun E, Turner CA;

XX

DR WPI: 2002-731353/79.  
DR P-PSDB; ABG70921.  
XX New human ion channel-related nucleic acid sequences useful for the  
PT treatment of cancer, arthritis or as antiviral agents, in therapeutic,  
PT diagnostic and pharmacogenomic applications.  
XX  
PS Disclosure; Page 13; 20pp; English.  
XX  
CC The invention relates to an isolated nucleic acid molecule encoding a  
CC novel human membrane protein/ion channel-related protein, including a  
CC vector sequence encoding the proteins. The nucleic acid and its encoded  
CC amino acid sequences are useful in therapeutic, diagnostic and  
CC pharmacogenomic applications. The nucleic acid sequences and the encoding  
CC amino acid sequences are useful in microarrays or other assay formats, to  
CC screen a collection of genetic material from patients that have  
CC particular medical conditions, and to identify mutations associated with  
CC a particular disease, and also in diagnostic or prognostic assays.  
CC Nucleic acid sequences and the amino acid sequences are useful in  
CC screening of drugs effective in the treatment of symptomatic or  
CC phenotypic manifestation perturbing the normal function of a new human  
CC protein (NHP) in the body. The nucleic acid and the amino acid sequences  
CC are useful in diagnosis, drug screening, clinical trial monitoring, the  
CC treatment of diseases and disorders and in cosmetic or nutritional  
CC applications. NHPs are useful to treat a disease, or to therapeutically  
CC augment the efficacy of chemotherapeutic agents useful in the treatment  
CC of cancer, arthritis or as antiviral agents. The present sequence is a  
CC cDNA encoding a novel human membrane protein/ion channel-related protein  
XX  
SQ Sequence 680 BP; 126 A; 212 C; 201 G; 139 T; 0 U; 2 Other;

Query Match 100.0%; Score 363; DB 6; Length 680;  
Best Local Similarity 100.0%; Pred. NO. 2.2e-89;  
Matches 363; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 ATGGTGTAGTACACGGGGCGGAGCCAGACAGCGCTGCTCAGGACGGTGCCTGTCAGC 60  
DB 198 ATGGTGTAGTACACGGGGCGGAGCCAGACAGCGCTGCTCAGGACGGTGCCTGTCAGC 257  
QY 61 TCTGACCCCGACAGACGACTTTCTGAGCGCGCCAGCGCCAGCGCCAGCGCGGCGCAC 120  
DB 258 TCTGACCCCGACAGACGACTTTCTGAGCGCGCCAGCGCCAGCGCGGCGCAC 317  
QY 121 GCGCTGCCCTGTGCGACAGAGTTTCTGAGGTTTCTGAGGTTTCTGAGGTTTCTGAGG 180  
DB 318 GCGCTGCCCTGTGCGACAGAGTTTCTGAGGTTTCTGAGGTTTCTGAGGTTTCTGAGG 377  
QY 181 CACTTCACTACACGCGTGTCCACACTGCGGTGTCTACGAGACACCATGTTGGCAGCCATG 240  
DB 378 CACTTCACTACACGCGTGTCCACACTGCGGTGTCTACGAGACACCATGTTGGCAGCCATG 437  
QY 241 TTCACTGGGCGGACACTACATCCCGACCGGACTCCGAGGCGCGTACTTCTATCGACCGGAT 300  
DB 438 TTCACTGGGCGGACACTACATCCCGACCGGACTCCGAGGCGCGTACTTCTATCGACCGGAT 497  
QY 301 GGACACACTTTGGGTATGTTCTCTCTCTACATCAACTTTGAGTCCTAGCAGGTTGAT 360  
DB 498 GGACACACTTTGGGTATGTTCTCTCTCTACATCAACTTTGAGTCCTAGCAGGTTGAT 557  
QY 361 TAG 363  
DB 558 TAG 560

RESULT 2  
AAH99183  
ID AAH99183 standard; cDNA; 519 BP.  
XX  
AC AAH99183;  
XX  
D7 16-OCT-2001 (first entry)  
XX  
DE Human protein encoding cDNA sequence SEQ ID NO:18.

XX Human; cancer; ulcer; HIV infection; human immunodeficiency virus;  
KW antiinflammatory; antirheumatic; antiarthritic; immunosuppressive;  
KW antibacterial; endocrine; cardiac; central nervous system; virucide;  
KW anti-HIV; fungicide; antimutagen; cardiovascular; antianemic; anaemia;  
KW antiagregant; haemostatic; vulnary; antileuk; osteopathic; eczema;  
KW dermatological; antiallergic; antialsthetic; antidiabetic; cytostatic;  
KW neuroprotective; antidepressant; nootropic; antiparkinsonian; infection;  
KW immunostimulant; gene therapy; antisense therapy; vaccine; inflammation;  
KW antianaphylactic; rheumatoid arthritis; septic shock; pancreatitis;  
KW cardiac dysfunction; neuropathology; cardiac anaphylaxis; autoimmunity;  
KW genetic disease; haematopoietic disorder; platelet disorder; asthma;  
KW thrombocytopaenia; osteoporosis; severe combined immunodeficiency;  
KW allergic rhinitis; diabetes; multiple sclerosis; depression;  
KW Alzheimer's disease; Parkinson's disease; neurodegenerative disorder;  
KW neurological disorder; ss.  
XX  
OS Homo sapiens.  
XX WO200153455-A2.  
XX 26-JUL-2001.  
XX 22-DEC-2000; 2000WO-US035017.  
XX 23-DEC-1999; 99US-00471275.  
XX 21-JAN-2000; 2000US-00488725.  
XX 25-APR-2000; 2000US-00552317.  
XX (HYSE-) HYSEQ INC.  
XX  
XX Tang YT, Liu C, Drmanac RT;  
XX WPI; 2001-457603/49.  
XX P-PSDB; AAM25242.  
XX Isolated human polynucleotides encoding polypeptides, useful for the  
PT treatment and diagnosis of e.g. cancer, ulcers and HIV infection.  
XX  
PS Claim 1; Page 309; 1217pp; English.  
XX  
CC AAH99166 to AAH99304 encode the human proteins given in AAM25225 to  
CC AAM25963. The proteins can have activities based on the tissues and cells  
CC they are expressed in, such as: antiinflammatory; antirheumatic;  
CC antiarthritic; immunosuppressive; antibacterial; endocrine; cardiac;  
CC central nervous system; virucide; anti-HIV; fungicide; antimutagen;  
CC cardiovascular; antianemic; antiagregant; haemostatic; vulnary;  
CC antileuk; osteopathic; dermatological; antiallergic; antialsthetic;  
CC antidiabetic; cytostatic; neuroprotective; antidepressant; nootropic;  
CC antiparkinsonian; and immunostimulant. The proteins and polynucleotides  
CC encoding them can be used in gene therapy, antisense therapy and vaccine  
CC production. The proteins and polynucleotides are useful for screening for  
CC agonists or antagonists of a protein and for the treatment and diagnosis  
CC of disorders associated with the activity of a protein e.g. inflammation,  
CC rheumatoid arthritis, septic shock, pancreatitis, cardiac dysfunction,  
CC neuropathology, cardiac anaphylaxis, viral, bacterial, HIV and fungal  
CC infections, autoimmunity, genetic diseases, haematopoietic disorders,  
CC anaemia, platelet disorders, thrombocytopaenia, wounds, burns, ulcers,  
CC osteoporosis, severe combined immunodeficiency, eczema, allergic  
CC rhinitis, asthma, diabetes, cancer, multiple sclerosis, depression,  
CC Alzheimer's disease, Parkinson's disease, neurodegenerative and  
CC neurological disorders  
XX  
SQ Sequence 519 BP; 101 A; 169 C; 160 G; 89 T; 0 U; 0 Other;

Query Match 87.3%; Score 316.8; DB 4; Length 519;  
Best Local Similarity 99.4%; Pred. NO. 8.7e-77;  
Matches 318; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1 ATGGTGTAGTACACGGGGCGGAGCCAGACAGCGCTGTCAGACCGGTGCCATGTCAGC 60  
DB 69 ATGGTGTAGTACACGGGGCGGAGCCAGACAGCGCTGTCAGACCGGTGCCATGTCAGC 128



	QY	61	TCTGAGCGCGAAGA	CGACTTTTCTGGAGCGCGGCCACGCGGCACGCGAGCGGGGGCAC	120
	Dδ	129	TCTGAGCGCGAAGA	CGACTTTTCTGGAGCGCGGCCACGCGGCACGCGAGCGGGGGGGCAC	188
	QY	121	GCGTCGCCCTCCTCC	CACAGAGTTTCTCAGAGTTGTCCCTCTAACATCTCGAGGGGCT	-180
	Dδ	189	GCGTCGCCCTCCTCC	CACAGAGTTTCTCAGAGTTGTCCCTCTAACATCTCGAGGGGCT	248
	QY	181	CACTTCACTACACG	CCTGTCCACATCGGGTGCTACGAAGACACCATTGTGGGAGCCATG	240
	Dδ	249	CACCTTCACTACACG	CCTGTCCACATCGGGTGCTACGAAGACACCATTGTGGGAGCCATG	308
	QY	241	TTTCAGTGGGGGCACT	PACATCCCCACGACCTCGAGGGCCGGTAGCTTTCATCGACCGAGAT	300
	Dδ	309	TTTCAGTGGGGGCACT	PACATCCCCACGACCTCGAGGGCCGGTAGCTTTCATCGACCGAGAT	368
	QY	301	GGCACACACTTTGGGT	ATGT 320	
	Dδ	369	GGCACACACTTTGGAG	ATGT 388	

RESULT 3  
ABX71180  
ID ABX71180 standard; cDNA; 1068 BP.

AC ABX71180;

DT 05-MAR-2003 (first entry)

Novel human cDNA sequence #405.

Human; gene; as; nervous system disorder; peripheral neuropathy;  
Huntington's disease; ankyrochonic lateral sclerosis; haemophilia;  
neurodegenerative disease; Parkinson's disease; Alzheimer's disease;  
autoimmune disease; systemic lupus erythematosus; rheumatoid arthritis;  
insulin-dependent diabetes mellitus; anaemia; thrombocytopaenia; wound;  
ulcer; burn; bone disorder; osteoporosis; osteoarthritis; stroke;  
fibrosis; reperfusion injury; infection; allergic rhinitis; asthma;  
coagulation disorder; cancer; tumour; inflammatory disease; septic shock;  
Crohn's disease; anaphylaxis; proliferation; chemotactic;  
differentiation; stem cell growth factor; haematopoiesis; chemokinetic;  
haemostatic; antiinflammatory; expressed sequence tag; EST

OS Homo sapiens.

PN WO200281731-A2

17-OCT-2002

29--TAN-2002: 2002WO-HIS001222

30-JAN-2001 2001US-00774528

XX  
PA (HVSP-) HVSP0 TNC

PA (HYSE-) HYSEQ INC.  
PA (GOOD/) GOODRICH P W

XX	Tang	Ty	Liu	C	Zhou	P	Agundi	V	Zhang	J	Zhao	QA	Ren	P.
----	------	----	-----	---	------	---	--------	---	-------	---	------	----	-----	----

PI Xue AJ, Yang Y, Wehrman T, Wang J, Wang D, Drmanac RT;

DR. WPI; 2003-058563/05.

PT Novel polypeptide useful for treating neurodegenerative diseases, myeloid  
PT or lymphoid cell disorders, bone disorders, mechanical and traumatic  
PT disorders, coagulation disorders, and inflammatory diseases

XX  
ps  
Claim 1: page: 612pp: English.

xx CC This invention relates to the cDNA sequences encoding an isolated novel  
CC human polypeptide. The protein encoded by the nucleic acid of the  
CC invention is useful for treating central and peripheral nervous system  
CC diseases (e.g. peripheral neuropathy, Huntington's disease, amyotrophic  
CC lateral sclerosis); neurodegenerative diseases (e.g. Parkinson's disease,  
CC Alzheimer's disease); autoimmune disease (e.g. systemic lupus  
CC

erythematous, rheumatoid arthritis, insulin-dependent diabetes mellitus); myeloid or lymphoid cell disorders (e.g. anaemia and thrombocytopenia); wounds, ulcers, burns; bone disorders (e.g. osteoporosis, osteoarthritis); mechanical and traumatic disorders (e.g. stroke, head trauma); lung or liver fibrosis; reperfusion injury in various tissues such as bacterial, viral or fungal infections; allergic conditions such as allergic rhinitis, asthma; coagulation disorders (e.g. haemophilia); cancer and tumours; and inflammatory diseases (e.g. septic shock, Crohn's disease, anaphylaxis). The protein may be used to inhibit the growth, infection or function of infectious agents such as bacteria, fungi, viruses, or to effect bodily characteristics, biorhythms or circadian cycles of rhythms. The protein may also have proliferation/differentiation, stem cell growth factor, haematopoiesis regulation, immune stimulating or suppressing, chemotactic/chemokinetic, haemostatic and thrombolytic, receptor/ligand, and anti-inflammatory activities. The cDNA sequences of the invention are useful for expressing recombinant protein for analysis. The present sequence represents a novel human cDNA sequence of the invention, this sequence is an expressed sequence tag (EST) and was identified using subtractive hybridisation

Query Match	87.3%	Score 316.8;	DB 7;	Length 1068;
Best Local Similarity	99.4%;	Pred. No. 1e-76;		
Matches 318:	Conservative	0;	Mismatches 2;	Indels 0;
				Gaps 0;

Qy	1	ATGTGGTGTAGTCA	CGGGCGGGAGCC	AGACCGCTCGT	CAGGACGGTGC	CAATGTCCAGC	60
Db	100	ATGGTGTGTAGTCA	GGGGCGGGAGCC	AGACCGCTCGT	CAGGACGGTGC	CAATGTCCAGC	150
Qy	61	TTCTGACGCGCGA	AGACGACTTTCT	GTGAGCCGGCC	CACGCGCGG	CCACGACGGCGGGGCAC	120
Db	160	TTCTGACGCGCGA	AGACGACTTTCT	GTGAGCCGGCC	CACGCGCGG	CCACGACGGCGGGGCAC	210
Qy	121	GGCTGCCCCCTG	CTGCCACAGAG	TTTCTGAGTTT	CTGAGTTGTT	CCCCCTTAACATCGAGGGGGCT	180
Db	220	GAGCTGCCCTCT	CTGCCACAGAG	TTTCTGAGTTT	CTGAGTTGTT	CCCCCTTAACATCGAGGGGGCT	270
Qy	181	CACCTTCACCTAC	ACGGCTCTGCC	ACACCTGCGGTG	CTACGAAGAC	ACCATTGTCGCGACGCCATG	240
Db	280	CACCTTCACCTAC	ACGGCTCTGCC	ACACCTGCGGTG	CTACGAAGAC	ACCATTGTCGCGACGCCATG	330
Qy	241	TTTCAGTGGGGG	CACTAATCCCC	ACGCACTCCG	AGGGCGGGTACT	TTCATCGACCCGAGAT	300
Db	340	TTTCAGTGGGGG	CACTAATCCCC	ACGCACTCCG	AGGGCGGGTACT	TTCATCGACCCGAGAT	390
Qy	301	GGCACACACTTT	GGGTATGT	320			
Db	400	GGCACACACTTT	GGGAGAT	419			

RESULT 4  
AAA95776  
ID AAA95776 standard: cDNA: 1124 BP.

XX  
AC  
AA95776:

29-SEP-2001 (first entry)

Human immune system molecule cDNA from Tocyte clone 2751129.

XX Anti-inflammatory; keratolytic; anti-HIV; anti-allergic; antianaemic;  
 KW antiarteriosclerotic; antiasthmatic; antidiabetic; nephrotropic; cancer;  
 KW antitumor; dermatologic; antithyroid; virucide; hepatotropic; antibody;  
 KW immunosuppressive; cystostatic; fungicide; protozoacide; antibacterial;  
 KW gene therapy; diagnostic; immunological disorder; viral infection; ss;  
 KW bacterial infection; fungal infection; parasitic infection; immunoen-

[illegible]

3  
 4  
 5  
 6  
 7  
 8  
 9  
 10  
 11  
 12  
 13  
 14  
 15  
 16  
 17  
 18  
 19  
 20  
 21  
 22  
 23  
 24  
 25  
 26  
 27  
 28  
 29  
 30  
 31  
 32  
 33  
 34  
 35  
 36  
 37  
 38  
 39  
 40  
 41  
 42  
 43  
 44  
 45  
 46  
 47  
 48  
 49  
 50  
 51  
 52  
 53  
 54  
 55  
 56  
 57  
 58  
 59  
 60  
 61  
 62  
 63  
 64  
 65  
 66  
 67  
 68  
 69  
 70  
 71  
 72  
 73  
 74  
 75  
 76  
 77  
 78  
 79  
 80  
 81  
 82  
 83  
 84  
 85  
 86  
 87  
 88  
 89  
 90  
 91  
 92  
 93  
 94  
 95  
 96  
 97  
 98  
 99  
 100  
 101  
 102  
 103  
 104  
 105  
 106  
 107  
 108  
 109  
 110  
 111  
 112  
 113  
 114  
 115  
 116  
 117  
 118  
 119  
 120  
 121  
 122  
 123  
 124  
 125  
 126  
 127  
 128  
 129  
 130  
 131  
 132  
 133  
 134  
 135  
 136  
 137  
 138  
 139  
 140  
 141  
 142  
 143  
 144  
 145  
 146  
 147  
 148  
 149  
 150  
 151  
 152  
 153  
 154  
 155  
 156  
 157  
 158  
 159  
 160  
 161  
 162  
 163  
 164  
 165  
 166  
 167  
 168  
 169  
 170  
 171  
 172  
 173  
 174  
 175  
 176  
 177  
 178  
 179  
 180  
 181  
 182  
 183  
 184  
 185  
 186  
 187  
 188  
 189  
 190  
 191  
 192  
 193  
 194  
 195  
 196  
 197  
 198  
 199  
 200  
 201  
 202  
 203  
 204  
 205  
 206  
 207  
 208  
 209  
 210  
 211  
 212  
 213  
 214  
 215  
 216  
 217  
 218  
 219  
 220  
 221  
 222  
 223  
 224  
 225  
 226  
 227  
 228  
 229  
 230  
 231  
 232  
 233  
 234  
 235  
 236  
 237  
 238  
 239  
 240  
 241  
 242  
 243  
 244  
 245  
 246  
 247  
 248  
 249  
 250  
 251  
 252  
 253  
 254  
 255  
 256  
 257  
 258  
 259  
 260  
 261  
 262  
 263  
 264  
 265  
 266  
 267  
 268  
 269  
 270  
 271  
 272  
 273  
 274  
 275  
 276  
 277  
 278  
 279  
 280  
 281  
 282  
 283  
 284  
 285  
 286  
 287  
 288  
 289  
 290  
 291  
 292  
 293  
 294  
 295  
 296  
 297  
 298  
 299  
 300  
 301  
 302  
 303  
 304  
 305  
 306  
 307  
 308  
 309  
 310  
 311  
 312  
 313  
 314  
 315  
 316  
 317  
 318  
 319  
 320  
 321  
 322  
 323  
 324  
 325  
 326  
 327  
 328  
 329  
 330  
 331  
 332  
 333  
 334  
 335  
 336  
 337  
 338  
 339  
 340  
 341  
 342  
 343  
 344  
 345  
 346  
 347  
 348  
 349  
 350  
 351  
 352  
 353  
 354  
 355  
 356  
 357  
 358  
 359  
 360  
 361  
 362  
 363  
 364  
 365  
 366  
 367  
 368  
 369  
 370  
 371  
 372  
 373  
 374  
 375  
 376  
 377  
 378  
 379  
 380  
 381  
 382  
 383  
 384  
 385  
 386  
 387  
 388  
 389  
 390  
 391  
 392  
 393  
 394  
 395  
 396  
 397  
 398  
 399  
 400  
 401  
 402  
 403  
 404  
 405  
 406  
 407  
 408  
 409  
 410  
 411  
 412  
 413  
 414  
 415  
 416  
 417  
 418  
 419  
 420  
 421  
 422  
 423  
 424  
 425  
 426  
 427  
 428  
 429  
 430  
 431  
 432  
 433  
 434  
 435  
 436  
 437  
 438  
 439  
 440  
 441  
 442  
 443  
 444  
 445  
 446  
 447  
 448  
 449  
 450  
 451  
 452  
 453  
 454  
 455  
 456  
 457  
 458  
 459  
 460  
 461  
 462  
 463  
 464  
 465  
 466  
 467  
 468  
 469  
 470  
 471  
 472  
 473  
 474  
 475  
 476  
 477  
 478  
 479  
 480  
 481  
 482  
 483  
 484  
 485  
 486  
 487  
 488  
 489  
 490  
 491  
 492  
 493  
 494  
 495  
 496  
 497  
 498  
 499  
 500  
 501  
 502  
 503  
 504  
 505  
 506  
 507  
 508  
 509  
 510  
 511  
 512  
 513  
 514  
 515  
 516  
 517  
 518  
 519  
 520  
 521  
 522  
 523  
 524  
 525  
 526  
 527

[illegible]

PD 12-OCT-2000.

04-APR-2000; 2000WO-US009072.

05-APR-1999; 99US-0127852P.

05-MAY-1999; 99US-0132647P.

(INCY-) INCYTE PHARM INC.

Yue H, Lal P, Tang YT, Baughn MR, Azimzai Y, Lu DM;

WPI; 2000-665005/64.

P-PSDB; AAB15537.

New human immune system molecules 1-15 and polynucleotides encoding them useful for diagnosing, treating or preventing e.g. immunological disorders, infections, cell proliferative disorders, microbial infections.

Claim 4; Page 88; 95pp; English.

This sequence represents the cDNA for a human immune system molecule (IMOL) isolated as clone 2751129 from the Incyte THP2AS08 library. The human IMOLs (AAB15536-B15550) and their encoding polynucleotides (AA959775-A95789), and compositions comprising them are useful for the diagnosis, treatment or prevention of immunological disorders, infections and cell proliferative disorders, including cancer. The IMOL may be used to treat or prevent disorders associated with decreased expression or activity of IMOL, such as immunological disorders (e.g. inflammation, actinic keratosis, AIDS, Addison's disease), haematopoietic cancer, infections caused by virus (e.g. adenovirus, parvovirus, coronavirus), bacteria (e.g. Staphylococcus, Streptococcus, Shigella), fungi (e.g. Aspergillus, Blastomyces), parasites (e.g. Plasmodium, Trypanosoma, intestinal protozoa), cell proliferative disorders (e.g. actinic keratosis, arteriosclerosis, bursitis), and cancers (e.g. leukemia, melanoma, sarcoma). The peptides are also useful as immunogens for the development of antibodies that specifically recognize these peptides. The polynucleotides may be used to detect and quantify gene expression in biopsied tissues in which expression of IMOL may be correlated with the disease, as targets in a microarray, to detect differences in gene sequences among normal, carrier and affected individuals, and for screening libraries of compounds in drug screening techniques. Antibodies which specifically bind to IMOL may be used for the diagnosis of disorders characterized by expression of IMOL, or in assays to monitor patients being treated with IMOL or agonists, antagonists, or inhibitors of IMOL

Sequence 1124 BP; 227 A; 319 C; 343 G; 233 T; 0 U; 2 Other:

Query Match 87.3%; Score 316.8; DB 3; Length 1124;  
Best Local Similarity 99.4%; Pred. No. 1.1e-76;  
Matches 318; Conservative 0; Mismatches 2; Indels 0; Gaps 0

QY 1 ATGTGTGTAGTCACGGCGGGAGCCAGACAGCGGTGTCTCAGGACGGTGCCTCAGACCGTCCAGC 60  
Db 28 ATGTGTGTAGTCACGGCGGGAGCCAGACAGCGGTGTCTCAGGACGGTGCCTCAGC 87

QY 61 TCTGACCGCGAGACGACTTTCTGTGAGCGCGCAGCGCGACGCGCCAGCGCGGGGCAC 120  
Db 88 TCTGACCGCGAGACGACTTTCTGTGAGCGCGCGCAGCGCGCGCAGCGCGGGGGGCAC 147

QY 121 GCGTGCCTCCCTGCTGCCACAGAGATTCTCTCAGAGTTGTTCCTCTTAAACATCGAGGGGGCT 180  
Db 148 GCGTGCCTCCCTGCTGCCACAGAGATTCTCTCAGAGTTGTTCCTCTTAAACATCGAGGGGGCT 207

QY 181 CACTTCACGTACAGCGGTGTCCACACTCGGGGTGTACGAGACACCATGTGGCAGCCATG 240  
Db 208 CACTTCACGTACAGCGGTGTCCACACTCGGGGTGTACGAGACACCATGTGGCAGCCATG 267

QY 241 TTCAGTGGCGGCATCTACATCCCAAGACACTCCGAGGCGCGGTACTTTCATCGACCGAGAT 300  
Db 268 TTCAGTGGCGGCATCTACATCCCAAGACACTCCGAGGCGCGGTACTTTCATCGACCGAGAT 327

QY 301 GGCACACACTTTGGGTATGT 320

Db	328	GGCACACACTTGGACATGT 347
RESULT 5		
ADA53477		
ID	ADA53477	standard; cDNA; 2576 BP.
XX	AC	ADA53477;
XX	AC	
XX	DT	20-NOV-2003 (first entry)
XX	DT	
XX	DE	Human coding sequence, SEQ ID 1045.
XX	DE	
XX	DE	Cytostatic; Anti-inflammatory; Osteopathic; Neuroprotective; Nootropic;
KW	KW	Gene Therapy; human; secretory protein; membrane proteins; cancer;
KW	KW	inflammatory disease; osteoporosis; neurological disease; gene; ss.
XX	OS	Homo sapiens.
XX	OS	
XX	PN	EP1293569-A2.
XX	PN	
XX	PD	19-MAR-2003.
XX	PD	
XX	PF	21-MAR-2002; 2002EP-00006586.
XX	PF	
XX	PR	14-SEP-2001; 2001JP-00328381.
PR	PR	24-JAN-2002; 2002US-0350435P.
XX	XX	
PA	PA	(HELI-) HELIX RES INST.
PA	PA	(REAS-) RES ASSOC BIOTECHNOLOGY.
XX	PI	Isogai T, Sugiyama T, Otsuki T, Wakamatsu A, Sato H, Ishii S;
PI	PI	Yamamoto Y, Isono Y, Hao Y, Otsuka K, Nagai K, Irie R, Tamechika I;
PI	PI	Seki N, Yoshikawa T, Otsuka M, Nagahari K, Masuho Y;
XX	XX	
DR	DR	WPI: 2003-395539/38.
DR	DR	P-PSDB; ADA55116.
XX	XX	
PT	PT	New polynucleotides encoding full-length polypeptides, e.g. secretory
PT	PT	and/or membrane proteins, useful for developing medicines for diseases in
PT	PT	which the gene is involved, or as target molecules for gene therapy.
XX	XX	
PS	PS	Claim 1; SEQ ID NO 1045; 205pp; English.
XX	XX	
CC	CC	The present invention relates to novel human secretory or membrane
CC	CC	proteins (ADA54072-ADA55710) and their coding sequences (ADA52433-
CC	CC	ADA54071). The coding sequences are useful in the gene therapy of
CC	CC	diseases caused by abnormalities of the proteins, e.g. cancer,
CC	CC	inflammatory diseases, osteoporosis or neurological disease.
XX	XX	
SQ	SQ	Sequence 2576 BP; 543 A; 732 C; 661 G; 640 T; 0 U; 0 Other;
Query Match		87.3%; Score 316.8; DB 7; Length 2576;
Best Local Similarity		99.4%; Pred. NO. 1.3e-76;
Matches 318; Conservative		0; Mismatches 2; Indels 0; Gaps 0;
Qy	1	ATGCTGTAGTCTACGGCGGGCGGACGACAGACAGCCGCTCGTCAGGACGGTGCCATGTCCAGC 60
Db	108	ATGGTGGTAGTCTACGGCGGGGAGCCAGACAGCCGCTCGTCAGGACGGTGCCATGTCCAGC 167
Qy	61	TCTGACGCCGAGACAGCATTTCTGAGACCGGCCACCGCCAGCGCCAGCGAGCGGGGGCAC 120
Db	168	TCTGACGCCGAGACAGCATTTCTGAGACCGGGCCACCGCCAGCGCCAGCGAGCGGGGGCAC 227
Qy	121	GGCGTGCCTCTGTCACAGGAGTTTCTGAGTTGTTCCTCCCTTAACATCGGAGGGGCT 180
Db	228	GGCGTGCCTCTGTCACAGGAGTTTCTGAGTTGTTCCTCCCTTAACATCGGAGGGGCT 287
Qy	181	CACCTTCACTACACGCTGTGCCACACTGCGGTGTCTAGAGACACCATGTGGCAGCCATG 240
Db	288	CACCTTCACTACACGCTGTGCCACACTGCGGTGTCTAGAGACACCATGTGGCAGCCATG 347

301 GGCACACACTTTGGGTATGT 320





GenCore version 5.1.6  
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: June 8, 2004, 09:16:13 ; Search time 84 Seconds  
(without alignments)  
2398.181 Million cell updates/sec

Title: US-10-024-579-4

Perfect score: 363

Sequence: 1 atggttggtgtcagcggggcg.....tagctctagcaggtgattag 363

Scoring table: IDENTITY NUC

Gapop 10.0, Gapext 1.0

Searched: 682709 seqs, 277475446 residues

Total number of hits satisfying chosen parameters: 1365418

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

Issued Patents NA:\*

1: /cgm2\_6/ptodata/2/ina/5A COMB.seq.\*

2: /cgm2\_6/ptodata/2/ina/5B COMB.seq.\*

3: /cgm2\_6/ptodata/2/ina/6A COMB.seq.\*

4: /cgm2\_6/ptodata/2/ina/6B COMB.seq.\*

5: /cgm2\_6/ptodata/2/ina/PTCUS COMB.seq.\*

6: /cgm2\_6/ptodata/2/ina/PTCUS COMB.seq.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	49.2	13.5	318	4	US-09-621-976-1336
2	48.4	13.3	1542	4	US-09-336-643A-24
3	48.4	13.3	1751	4	US-09-336-643A-23
4	48.4	13.3	1800	4	US-09-336-643A-21
5	48.4	13.3	1836	4	US-09-336-643A-22
6	42.6	11.7	1450	4	US-09-620-312D-1058
7	42.6	11.7	1862	4	US-09-336-643A-11
8	40.4	11.1	1742	4	US-09-620-312D-957
9	35.6	9.8	783	4	US-09-252-991A-3285
10	35.6	9.8	1044	4	US-09-252-991A-3218
11	35.6	9.8	1434	4	US-09-252-991A-3351
12	35	9.6	789	4	US-09-489-039A-4812
13	34.4	9.5	471	4	US-09-252-991A-4718
14	34.4	9.5	612	4	US-09-252-991A-4793
15	34.4	9.5	954	4	US-09-252-991A-4820
16	34.4	9.5	2865	4	US-09-252-991A-4675
17	34.4	9.5	4563	4	US-09-252-991A-4765
18	34.4	9.5	5092	3	US-09-412-545-1
19	34.2	9.4	711	4	US-09-252-991A-1589
20	34.2	9.4	4403765	3	US-09-103-840A-2
21	34.2	9.4	4411529	3	US-09-103-840A-1
22	33.8	9.3	3722	4	US-10-164-595-9
23	33.6	9.3	430	4	US-09-621-976-16656
24	33.4	9.2	996	4	US-09-252-991A-2201
25	33.4	9.2	1641	4	US-09-252-991A-2551
26	33.4	9.2	1791	4	US-09-252-991A-2363
27	33	9.1	690	4	US-09-252-991A-3288

28 9.1 898 2 US-08-997-080-185 Sequence 185, App

29 9.1 898 3 US-08-997-362-185 Sequence 185, App

30 9.1 898 3 US-09-095-855-185 Sequence 185, App

31 9.1 898 4 US-09-324-542-185 Sequence 185, App

32 9.1 898 4 US-09-205-426-185 Sequence 185, App

33 9.1 1173 4 US-09-252-991A-3422 Sequence 3422, Ap

34 9.1 1364 3 US-09-095-855-204 Sequence 204, App

35 9.1 1364 4 US-09-205-426-204 Sequence 204, App

36 9.1 1434 4 US-09-252-991A-3260 Sequence 2260, Ap

37 9.1 3937 4 US-10-164-595-7 Sequence 7, Appli

38 9.0 4403765 3 US-09-103-840A-2 Sequence 2, Appli

39 9.0 4411529 3 US-09-103-840A-1 Sequence 1, Appli

40 9.0 1500 4 US-09-252-991A-6254 Sequence 6254, Ap

41 9.0 1536 4 US-09-252-991A-6044 Sequence 6044, Ap

42 9.0 1695 4 US-09-252-991A-6044 Sequence 6044, Ap

43 9.0 2073 4 US-09-489-039A-3869 Sequence 3869, Ap

44 9.0 20235 1 US-07-642-734C-3 Sequence 3, Appli

45 9.0 20235 3 US-08-439-009A-3 Sequence 3, Appli

#### ALIGNMENTS

RESULT 1

US-09-621-976-1336

; Sequence 1336, Application US/09621976

; Patent No. 6639063

; GENERAL INFORMATION:

; APPLICANT: Dumas Milne Edwards, J.B.

; APPLICANT: Jobert, S.

; APPLICANT: Giordano, J.Y.

; TITLE OF INVENTION: ESTs and Encoded Human Proteins.

; FILE REFERENCE: GENSET.054PR2

; CURRENT APPLICATION NUMBER: US/09/621,976

; CURRENT FILING DATE: 2000-07-21

; NUMBER OF SEQ ID NOS: 19335

; SOFTWARE: Patent.pm

; SEQ ID NO 1336

; LENGTH: 318

; TYPE: DNA

; ORGANISM: Homo sapiens

; FEATURE:

; NAME/KEY: CDS

; LOCATION: 39..317

US-09-621-976-1336

Query Match 13.6%; Score 49.2; DB 4; Length 318;

Best Local Similarity 63.0%; Pred. No. 0.00012;

Matches 92; Conservative 0; Mismatches 53; Indels 1; Gaps 1;

Qy 169 ATCGAGGGGCTCACTTCTACTACACCCCTGTCCACACTGGGTGCTACGAGACACCATG 228

Db 148 ATGTGGGTGGAGCCCTTACTATACCACCATGCAGAC-GCTGACCAAGCAGGACCATG 206

Qy 229 TTGGCAGCCATGTTCACTGGGGGCGGCACTACATCCCAACGACTCCGAGGGCCGGTACTTC 288

Db 207 CTGAGGCCAATGTTACGGGGCCATGGAGTGTCTCCACGAGTGAAGGTGATCTTC 266

Qy 289 ATCGACCGAGATGGCAGACACTTTGG 314

Db 267 ATTGACCGCTGGGAGGACACTTTGG 292

RESULT 2

US-09-336-643A-24

; Sequence 24, Application US/09336643A

; Patent No. 6399761

; GENERAL INFORMATION:

; APPLICANT: Miller, Andrew P.

; APPLICANT: Curran, Mark Edward

; APPLICANT: Hu, Ping

; APPLICANT: Rutter, Marc

; APPLICANT: Wang, Jian-Wang

;; TITLE OF INVENTION: No. 6399761el Human Potassium Channels  
;; FILE REFERENCE: SEQ-15P  
;; CURRENT APPLICATION NUMBER: US/09/336,643A  
;; CURRENT FILING DATE: 1999-06-18  
;; PRIOR APPLICATION NUMBER: 60/076,687  
;; PRIOR FILING DATE: 1998-08-07  
;; PRIOR APPLICATION NUMBER: 60/116,448  
;; PRIOR FILING DATE: 1999-01-19  
;; PRIOR APPLICATION NUMBER: PCT/US99/03826  
;; PRIOR FILING DATE: 1999-02-22  
;; NUMBER OF SEQ ID NOS: 87  
;; SOFTWARE: FastSeq for Windows Version 4.0  
;; SEQ ID NO 24  
;; TYPE: DNA  
;; ORGANISM: H. sapiens  
;; FEATURE:  
;; NAME/KEY: CDS  
;; LOCATION: (88)...(799)  
;; OTHER INFORMATION: K+Hnov28, splice 4  
US-09-336-643A-24

Query Match 13.3%; Score 48.4; DB 4; Length 1542;  
Best Local Similarity 54.5%; Pred. No. 0.00032;  
Matches 97; Conservative 0; Mismatches 81; Indels 0; Gaps 0;  
QY 144 GTTTCCTGAGGTGTTCCCTTAACATCGAGGGGCTCACTTCATCAGCGCTGTCCAC 203  
Db 114 GATGACTGACCCCACTACATTAATGTTAGTGGGACACTTGTATACAGCTCTCTCACCAC 173  
QY 204 ACTGCGGTGCTACGAGACACCATGTTGACCGCATGTTTCAGTGGCGGCGCACTACATCCC 263  
Db 174 ATTGACGGTTCACCGGATTCATGCTTGGAGCTAATGTTGGGGGGGACTTCCCAACAGC 233  
QY 264 CACGAGCTCCGAGGGCGGTACTTCATCGACCGAGATGGGACACACTTTGGGTATGTC 321  
Db 234 TCGAGACCTCAAGGCAATTAATTTATGATCGAGATGGACCTCTTTCCGATATGTC 291

RESULT 3  
US-09-336-643A-23  
;; Sequence 23, Application US/09336643A  
;; Patent No. 6399761  
;; GENERAL INFORMATION:  
;; APPLICANT: Miller, Andrew P.  
;; APPLICANT: Curran, Mark Edward  
;; APPLICANT: Rutter, Marc  
;; APPLICANT: Wang, Jian-Wang  
;; TITLE OF INVENTION: No. 6399761el Human Potassium Channels  
;; FILE REFERENCE: SEQ-15P  
;; CURRENT APPLICATION NUMBER: US/09/336,643A  
;; CURRENT FILING DATE: 1999-06-18  
;; PRIOR APPLICATION NUMBER: 60/076,687  
;; PRIOR FILING DATE: 1998-08-07  
;; PRIOR APPLICATION NUMBER: 60/116,448  
;; PRIOR FILING DATE: 1999-01-19  
;; PRIOR APPLICATION NUMBER: PCT/US99/03826  
;; PRIOR FILING DATE: 1999-02-22  
;; NUMBER OF SEQ ID NOS: 87  
;; SOFTWARE: FastSeq for Windows Version 4.0  
;; SEQ ID NO 23  
;; TYPE: DNA  
;; ORGANISM: H. sapiens  
;; FEATURE:  
;; NAME/KEY: CDS  
;; LOCATION: (297)...(1008)  
;; OTHER INFORMATION: K+Hnov28 splice 3  
US-09-336-643A-23

Query Match 13.3%; Score 48.4; DB 4; Length 1751;  
Best Local Similarity 54.5%; Pred. No. 0.00033;

Matches 97; Conservative 0; Mismatches 81; Indels 0; Gaps 0;  
QY 144 GTTTCCTGAGGTGTTCCCTTAACATCGAGGGGCTCACTTCATCAGCGCTGTCCAC 203  
Db 323 GATGACTGACCCCACTACATTAATGTTAGTGGGACACTTGTATACAGCTCTCTCACCAC 382  
QY 204 ACTGCGGTGCTACGAGACACCATGTTGCGAGCCATGTTTCAGTGGCGGCGCACTACATCCC 263  
Db 383 ATTGACGGTTCACCGGATTCATGCTTGGAGCTATGTTTGGGGGGGACTTCCCAACAGC 442  
QY 264 CACGAGCTCCGAGGGCGGTACTTCATCGACCGAGATGGGACACACTTTGGGTATGTC 321  
Db 443 TCGAGACCTCAAGGCAATTAATTTATGATCGAGATGGACCTCTTTCCGATATGTC 500

RESULT 4  
US-09-336-643A-21  
;; Sequence 21, Application US/09336643A  
;; Patent No. 6399761  
;; GENERAL INFORMATION:  
;; APPLICANT: Miller, Andrew P.  
;; APPLICANT: Curran, Mark Edward  
;; APPLICANT: Hu, Ping  
;; APPLICANT: Rutter, Marc  
;; APPLICANT: Wang, Jian-Wang  
;; TITLE OF INVENTION: No. 6399761el Human Potassium Channels  
;; FILE REFERENCE: SEQ-15P  
;; CURRENT APPLICATION NUMBER: US/09/336,643A  
;; CURRENT FILING DATE: 1999-06-18  
;; PRIOR APPLICATION NUMBER: 60/076,687  
;; PRIOR FILING DATE: 1998-08-07  
;; PRIOR APPLICATION NUMBER: 60/116,448  
;; PRIOR FILING DATE: 1999-01-19  
;; PRIOR APPLICATION NUMBER: PCT/US99/03826  
;; PRIOR FILING DATE: 1999-02-22  
;; NUMBER OF SEQ ID NOS: 87  
;; SOFTWARE: FastSeq for Windows Version 4.0  
;; SEQ ID NO 21  
;; LENGTH: 1800  
;; TYPE: DNA  
;; ORGANISM: H. sapiens  
;; FEATURE:  
;; NAME/KEY: CDS  
;; LOCATION: (346)...(1057)  
;; OTHER INFORMATION: K+Hnov28, splice 1  
US-09-336-643A-21

Query Match 13.3%; Score 48.4; DB 4; Length 1800;  
Best Local Similarity 54.5%; Pred. No. 0.00033;  
Matches 97; Conservative 0; Mismatches 81; Indels 0; Gaps 0;  
QY 144 GTTTCCTGAGGTGTTCCCTTAACATCGAGGGGCTCACTTCATCAGCGCTGTCCAC 203  
Db 372 GATGACTGACCCCACTACATTAATGTTAGTGGGACACTTGTATACAGCTCTCTCACCAC 431  
QY 204 ACTGCGGTGCTACGAGACACCATGTTGCGAGCCATGTTTCAGTGGCGGCGCACTACATCCC 263  
Db 432 ATTGACGGTTCACCGGATTCATGCTTGGAGCTATGTTTGGGGGGGACTTCCCAACAGC 491  
QY 264 CACGAGCTCCGAGGGCGGTACTTCATCGACCGAGATGGGACACACTTTGGGTATGTC 321  
Db 492 TCGAGACCTCAAGGCAATTAATTTATGATCGAGATGGACCTCTTTCCGATATGTC 549

RESULT 5  
US-09-336-643A-22  
;; Sequence 22, Application US/09336643A  
;; Patent No. 6399761  
;; GENERAL INFORMATION:  
;; APPLICANT: Miller, Andrew P.  
;; APPLICANT: Curran, Mark Edward  
;; APPLICANT: Hu, Ping  
;; APPLICANT: Rutter, Marc

RT	"Analysis of the mouse transcriptome based on functional annotation of					
RT	60,770 full-length cDNAs";					
RL	Nature 420:563-573(2002).					
DR	EXBL; AK029942; BAC26691.1; --					
DR	MGD; MGI:2442265; 9430010P06Rik.					
DR	GO: GO:0016020; C:membrane; IEA.					
DR	GO: GO:0008076; C:voltage-gated potassium channel complex; IEA.					
DR	GO: GO:0005151; F:protein binding; IEA.					
DR	GO: GO:0005249; F:voltage-gated potassium channel activity; IEA.					
DR	GO: GO:0006813; P:potassium ion transport; IEA.					
DR	InterPro; IPR000210; BTB_POZ.					
DR	pfam; PF02214; K_tetra; 1.					
DR	SMART; SM00325; BTB; 1.					
SQ	SEQUENCE 239 AA; 27173 MW; A889D2E9CBCE528A CRC64;					
Query Match	84.1%; Score 530.5; DB 11; Length 239;					
Best Local Similarity	87.5%; Pred.No. 1e-49;					
Matches 105; Conservative	4; Mismatches 6; Indels 5; Gaps 2;					
Qy	1 MVVVTGREPDSRRQDGAMSSDAEDDFLEPATPTATQAAGHALPLLQPPEPVVPLNIGGA 60					
Dd	1 MVVVTGREPDSRHSDGAMSSSRAEDDFLEPATTTATQAAGHGLPLLQPPEPVVPLNIGGA 60					
Qy	61 HFTRITSLTLCYEDTTLAAAFSGRRHYIPTDSRGRYIDRDGTGHGVSPSTINFEVLAD 120					
Dd	61 HFTRITSLTLCYEDTTLAAAFSGRRHYIPTDSRGRYIDRDGTGHGDV---LNF-LRSGD 115					
RESULT 4						
ID Q8BJK1	PRELIMINARY; PRT; 289 AA.					
AC Q8BJK1;						
DT 01-MAR-2003	(TrEMBLrel. 23, Created)					
DT 01-MAR-2003	(TrEMBLrel. 23, Last sequence update)					
DT 01-OCT-2003	(TrEMBLrel. 25, Last annotation update)					
DE CDNA FLJ32069 FIS.						
OS 9430010P06RIK.						
GN Mus musculus (Mouse).						
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;						
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Mus.						
OX NCBI_TaxID=10090;						
[?]						
RP SEQUENCE FROM N.A.						
RC STRAIN=C57BL/6J; TISSUE=Body;						
RX MEDLINE=22354683; PubMed=12466851;						
RA The FANTOM Consortium,						
RA the RIKEN Genome Exploration Research Group Phase I & II Team;						
RT "Analysis of the mouse transcriptome based on functional annotation of						
RT 60,770 full-length cDNAs.";						
RL Nature 420:563-573(2002).						
DR EXBL; AK083583; BAC38959.1; --						
DR MGD; MGI:2442265; 9430010P06Rik.						
DR GO: GO:0016020; C:membrane; IEA.						
DR GO: GO:0008076; C:voltage-gated potassium channel complex; IEA.						
DR GO: GO:0005151; F:protein binding; IEA.						
DR GO: GO:0005249; F:voltage-gated potassium channel activity; IEA.						
DR GO: GO:0006813; P:potassium ion transport; IEA.						
DR InterPro; IPR000210; BTB_POZ.						
DR InterPro; IPR001131; K_tetra.						
DR Pfam; PF02214; K_tetra; 1.						
DR SMART; SM00225; BTB; 1.						
SQ SEQUENCE 289 AA; 33079 MW; 64263FA2ADI9FC2F CRC64;						
Query Match	84.1%; Score 530.5; DB 11; Length 289;					
Best Local Similarity	87.5%; Pred.No. 1.3e-49;					
Matches 105; Conservative	4; Mismatches 6; Indels 5; Gaps 2;					
Qy	1 MVVVTGREPDSRRQDGAMSSDAEDDFLEPATPTATQAAGHALPLLQPPEPVVPLNIGGA 60					
Dd	1 MVVVTGREPDSRHSDGAMSSSRAEDDFLEPATTTATQAAGHGLPLLQPPEPVVPLNIGGA 60					
Qy	61 HFTRITSLTLCYEDTTLAAAFSGRRHYIPTDSRGRYIDRDGTGHGVSPSTINFEVLAD 120					

GenCore version 5.1.1.6  
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: June 8, 2004, 10:14:29 ; Search time 79 Seconds  
(without alignments)  
479.268 Million cell updates/sec

Title: US-10-024-579-5  
Perfect score: 631  
Sequence: 1 MVVVTGPRDPRRRQDGMSS.....GTHFGVSPSTNFWVLGAD 120

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 1017041 seqs, 315518202 residues

Total number of hits satisfying chosen parameters: 1017041

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : SPTREMBL 25:\*

1: sp\_archaea:\*

2: sp\_bacteria:\*

3: sp\_fungi:\*

4: sp\_human:\*

5: sp\_invertebrate:\*

6: sp\_mammal:\*

7: sp\_mhc:\*

8: sp\_organelle:\*

9: sp\_phage:\*

10: sp\_plant:\*

11: sp\_protist:\*

12: sp\_virus:\*

13: sp\_vertebrate:\*

14: sp\_unclassified:\*

15: sp\_virus:\*

16: sp\_bacteriap:\*

17: sp\_archaeap:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	560.5	88.8	288	4 Q81VRO	Q81VRO homo sapien
2	560.5	88.8	289	4 Q96MP8	Q96MP8 homo sapien
3	530.5	84.1	239	11 Q8C0S7	Q8C0S7 mus musculus
4	530.5	84.1	289	11 Q8BJK1	Q8BJK1 mus musculus
5	164	26.0	346	11 Q8C4C2	Q8C4C2 mus musculus
6	164	26.0	438	11 Q8CAA9	Q8CAA9 mus musculus
7	164	26.0	476	11 Q8C906	Q8C906 mus musculus
8	164	26.0	476	11 Q8BR74	Q8BR74 mus musculus
9	163.5	25.9	214	6 Q9BE68	Q9BE68 macaca fasc
10	162.5	25.8	477	11 Q8C9B0	Q8C9B0 mus musculus
11	150.5	23.9	228	5 Q9VDH3	Q9VDH3 drosophila
12	146	23.1	228	4 Q8TCA6	Q8TCA6 homo sapien
13	146	23.1	237	4 Q8NBS6	Q8NBS6 homo sapien
14	146	23.1	237	11 Q8BNL5	Q8BNL5 mus musculus
15	143.5	22.7	329	11 Q8BGV7	Q8BGV7 mus musculus
16	142	22.5	301	5 Q9V9F4	Q9V9F4 drosophila

17	141	22.3	237	4 Q8NC69	Q8NC69 homo sapien
18	140.5	22.3	329	4 Q96SA1	Q96SA1 homo sapien
19	140.5	22.3	329	4 Q8WZ19	Q8WZ19 homo sapien
20	140.5	22.3	329	11 Q7TQ24	Q7TQ24 rattus norv
21	139	22.0	298	10 Q9SE95	Q9SE95 arabidopsis
22	139	22.0	315	11 Q922M3	Q922M3 mus musculus
23	139	22.0	435	4 Q9P2M9	Q9P2M9 homo sapien
24	138.5	21.9	310	4 Q96SU0	Q96SU0 homo sapien
25	138.5	21.9	313	4 Q9H3F6	Q9H3F6 homo sapien
26	138.5	21.9	334	11 Q7TFL3	Q7TFL3 rattus norv
27	136	21.6	234	4 Q96N73	Q96N73 homo sapien
28	133	21.1	222	11 Q8C004	Q8C004 mus musculus
29	132.5	21.0	329	4 Q96P93	Q96P93 homo sapien
30	132	20.9	225	4 Q3BQ13	Q3BQ13 homo sapien
31	132	20.9	303	10 Q8LMO6	Q8LMO6 oryza sativ
32	132	20.6	333	4 Q8WUN2	Q8WUN2 homo sapien
33	129.5	20.5	316	11 Q7TNY1	Q7TNY1 rattus norv
34	127.5	20.2	156	11 Q8CBQ4	Q8CBQ4 mus musculus
35	127.5	20.2	325	4 Q96CX2	Q96CX2 homo sapien
36	126.5	20.0	352	5 Q86FF1	Q86FF1 schistosoma
37	125.5	19.9	316	11 Q70479	Q70479 mus musculus
38	125.5	19.9	316	11 Q8BZK5	Q8BZK5 mus musculus
39	125	19.8	259	4 Q8WVF5	Q8WVF5 homo sapien
40	125	19.8	259	11 Q9CYK4	Q9CYK4 mus musculus
41	125	19.8	259	11 Q9D7X1	Q9D7X1 mus musculus
42	124	19.7	259	11 Q8CCQ3	Q8CCQ3 mus musculus
43	122	19.3	283	4 Q96S11	Q96S11 homo sapien
44	121	19.2	283	11 Q8K0B1	Q8K0B1 mus musculus
45	121	19.2	292	11 Q8C7J6	Q8C7J6 mus musculus

#### ALIGNMENTS

#### RESULT 1

Q81VRO PRELIMINARY; PRT; 288 AA.

AC Q81VRO;  
DT 01-MAR-2003 (TREMBlrel. 23, Created)  
DT 01-MAR-2003 (TREMBlrel. 23, Last sequence update)  
DT 01-OCT-2003 (TREMBlrel. 25, Last annotation update)  
DE Hypothetical protein FLJ32069.  
OS Homo sapiens (Human).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
OX NCBI\_TaxID=9606;  
RN [1]  
RP SEQUENCE FROM N.A.  
RC TISSUE=Brain;  
RA Strausberg R.;  
RL Submitted (JAN-2003) to the EMBL/GenBank/DBJ databases.  
DR EMBL; BC042482; AAH42482.1; -.  
DR GO; GO:0016020; C:membrane; IEA.  
DR GO; GO:0008076; C:voltage-gated potassium channel complex; IEA.  
DR GO; GO:0005515; P:protein binding; IEA.  
DR GO; GO:0005249; P:voltage-gated potassium channel activity; IEA.  
DR GO; GO:0006813; P:potassium ion transport; IEA.  
DR InterPro; IPR000210; BTB\_POZ.  
DR InterPro; IPR003131; K\_tetra.  
DR Pfam; PF02214; K\_tetra; 1.  
DR SMART; SM00225; BTB; 1.  
KW Hypothetical protein.  
SQ SEQUENCE 288 AA; 32945 MW; 1D1F618CD5E45940 CRC64;

Query Match 88.8%; Score 560.5; DB 4; Length 288;  
Best Local Similarity 91.7%; Pred. No. 6.8e-53;  
Matches 110; Conservative 3; Mismatches 2; Indels 5; Gaps 2;

QY 1 MVVVTGPRDPRRRQDGMSSDAEDDDFLPATPTATQAGHALPLLPQEPFVPLNIGCA 60  
DB 1 MVVVTGPRDPRRRQDGMSSDAEDDDFLPATPTATQAGHALPLLPQEPFVPLNIGCA 60  
QY 61 HFTTTLSTLRCYEDTMLAAMFSGRRHYIPTDSEGRFYIDRDGTHFGVSPSTNFWVLGAD 120





GenCore version 5.1.6  
Copyright (c) 1993 - 2004 Compugen Ltd.

OM protein - protein search, using sw model

Run on: June 8, 2004, 10:12:49 ; Search time 39 Seconds  
(without alignments)  
160.216 Million cell updates/sec

Title: US-10-024-579-5

Perfect score: 631

Sequence: 1 MVVTVGRPDRSRDQAMSS.....GTHFGVYSPSTINPVVLGAD 120

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 141681 seqs, 52070155 residues

Total number of hits satisfying chosen parameters: 141681

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : SwissProt\_42:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	125.5	19.9	316	1	TNP1_HUMAN
2	98.5	15.6	647	1	Q3829 homo sapien
3	98.5	15.6	651	1	Q3829 homo sapien
4	91	14.4	265	1	Q37719 mus musculu
5	88.5	14.0	602	1	Q14681 homo sapien
6	85	13.5	655	1	P19024 rattus norv
7	85	13.5	655	1	Q3829 homo sapien
8	85	13.5	655	1	Q3829 mus musculu
9	85	13.5	655	1	Q3829 mus musculu
10	85	13.5	656	1	Q3829 mus musculu
11	84.5	13.4	602	1	Q3829 mus musculu
12	83.5	13.2	613	1	Q3829 mus musculu
13	82.5	13.1	490	1	Q3829 mus musculu
14	82.5	13.1	499	1	Q3829 mus musculu
15	81	12.8	630	1	Q3829 mus musculu
16	81	12.8	630	1	Q3829 mus musculu
17	81	12.8	630	1	Q3829 mus musculu
18	81	12.8	630	1	Q3829 mus musculu
19	79	12.5	525	1	Q3829 mus musculu
20	79	12.5	525	1	Q3829 mus musculu
21	78.5	12.4	495	1	Q3829 mus musculu
22	78.5	12.4	495	1	Q3829 mus musculu
23	78.5	12.4	495	1	Q3829 mus musculu
24	77.5	12.3	499	1	Q3829 mus musculu
25	76	12.0	523	1	Q3829 mus musculu
26	74.5	11.8	499	1	Q3829 mus musculu
27	74.5	11.8	499	1	Q3829 mus musculu
28	73	11.6	528	1	Q3829 mus musculu
29	73	11.6	528	1	Q3829 mus musculu
30	72	11.4	598	1	Q3829 mus musculu
31	71	11.3	653	1	Q3829 mus musculu
32	70.5	11.2	922	1	Q3829 mus musculu
33	69.5	11.0	894	1	Q3829 mus musculu

34 69.5 11.0 1114 1 SULLI\_DROME  
35 69 10.9 618 1 ORC2\_DROME  
36 69 10.9 806 1 DMSA\_HAEN  
37 68.5 10.9 360 1 PO51\_BOVIN  
38 68.5 10.9 654 1 C1K4\_MOUSE  
39 68.5 10.9 812 1 AXN2\_BRARE  
40 68 10.8 613 1 TX18\_MOUSE  
41 67.5 10.7 611 1 PES4\_YEAST  
42 67.5 10.7 634 1 C1K4\_MUSPP  
43 67 10.6 360 1 POS1\_PIG  
44 67 10.6 2472 1 NCR2\_MOUSE  
45 66.5 10.5 530 1 C1K6\_RAT

## ALIGNMENTS

RESULT 1  
TNP1\_HUMAN STANDARD; PRT; 316 AA.  
AC Q13829;  
DT 01-NOV-1997 (Rel. 35, Created)  
DT 01-NOV-1997 (Rel. 35, last sequence update)  
DT 10-OCT-2003 (Rel. 42, last annotation update)  
DE Tumor necrosis factor, alpha-induced protein 1, endothelial (P12 protein).  
DE TNFAIP1 OR EDPI.  
GN Homo sapiens (Human).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
OX NCBI\_TaxID=9606;  
RN [1]  
RS SEQUENCE FROM N.A.  
RC TISSUE=Endothelial cells;  
RX MEDLINE=92112779; PubMed=1370465;  
RA Wolf F.W., Marks R.M., Sarma V., Byers M.G., Katz R.W., Shows T.B., Dixit V.N.;  
RT "Characterization of a novel tumor necrosis factor-alpha-induced endothelial primary response gene.";  
J. Biol. Chem. 267:1317-1326(1992).

[2]  
RS SEQUENCE FROM N.A.  
RC Rieder M.J., Armet T.Z., Carrington D.P., Chung M.-W., Lee K.L., Poel C.L., Toth E.J., Yi Q., Nickerson D.A.;  
Submitted (DEC-2001) to the EMBL/GenBank/DBJ databases.  
RN [3]  
RS SEQUENCE FROM N.A.  
RC TISSUE=Lung;  
RX MEDLINE=22388257; PubMed=12477932;  
RA Klausner R.L., Feingold E.A., Grouse L.H., Derge J.G., Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D., Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K., Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F., Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L., Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E., Brownstein M.J., Ustin T.B., Toshiyuki S., Carninci P., Prange C., Rana S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullaly S.J., Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H., Richards D., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W., Villalón D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A., Fahy J., Helton E., Kettelman M., Madan A., Rodriguez S., Sanchez A., Whiting M., Madan A., Young A.C., Shevchenko V., Bouffard G.G., Blakeley R.W., Touchman J.W., Green E.D., Dickson M.C., Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.N., Krzyzinski M.I., Skalska U., Smalls D.E., Scheraga A., Schein J.E., Jones S.J.M., Marra M.A.;  
"Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences.";  
Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).  
RT -I- INDUCTION: By TNF-alpha, interleukin-1 beta and lipopolysaccharide (LPS).  
CC -I- SIMILARITY: Contains 1 BTB/POZ domain.

51 EVVPLNIGGAHFTTRLSTLRCYEDTMLAMPFSGRHYIPTDSEGRYPIDRDGTHFG----- 105

Result No.	Query		DB	ID	Description
	Score	Match Length			
1	125.5	19.9	348	2	A41784
2	111	17.6	190	2	T26019
3	106	16.8	220	2	T20366
4	103.5	16.4	373	2	T28685
5	98.5	15.6	651	2	A39372
6	92	14.6	670	2	T32221
7	90	14.3	643	2	S00480
8	88.5	14.0	602	2	JH0166
9	85	13.5	656	2	JH0193
10	84.5	13.4	304	2	S02284
11	84.5	13.4	514	2	C49507
12	84.5	13.4	602	2	A49507
13	83.5	13.2	460	2	T27759
14	83.5	13.2	597	2	S51212
15	82.5	13.1	476	2	S21144
16	82.5	13.1	490	2	A5312
17	82.5	13.1	499	2	T7466
18	81	12.8	530	2	JU0271
19	79	12.5	525	2	A43531
20	79	12.5	1495	2	S60255
21	78.5	12.4	495	2	A40090
22	78.5	12.4	495	2	B31113
23	78.5	12.4	499	2	I84204
24	78.5	12.4	499	2	A33814
25	77.5	12.3	134	2	T32065
26	77.5	12.3	208	2	T25973
27	77.5	12.3	495	2	I57680
28	77.5	12.3	613	2	A56031
29	77	12.2	523	2	A3101

US-10-056-984-5

Query Match 23.9%; Score 150.5; DB 14; Length 228;  
Best Local Similarity 49.2%; Pred. No. 7.6e-09;  
Matches 29; Conservative 12; Mismatches 17; Indels 1; Gaps 1;

Qy 50 PEVPLNIGGAHPTTSLRCYEDTDLAAMF-SGRHYIPTDSRGYFIDRDGTHFGYV 107  
Db 2 PEIILNVGVSYYTTLATLLQDKSTLILAEFGGRSLANDSKGRYFLDRDGVLFYI 60

RESULT 9

US-10-080-980-3  
; Sequence 3, Application US/10080980  
; Publication No. US2003036115A1  
; GENERAL INFORMATION:  
; APPLICANT: Bristol-Myers Squibb Company  
; TITLE OF INVENTION: POLYNUCLEOTIDE ENCODING A NOVEL HUMAN POTASSIUM CHANNEL BETA-SUB  
; TITLE OF INVENTION: K+beta6, EXPRESSED HIGHLY IN THE SMALL INTESTINE  
; FILE REFERENCE: D0121 NP  
; CURRENT APPLICATION NUMBER: US/10/080,980  
; CURRENT FILING DATE: 2002-02-21  
; PRIOR APPLICATION NUMBER: US 60/270,132  
; PRIOR FILING DATE: 2001-02-21  
; PRIOR APPLICATION NUMBER: US 60/278,953  
; PRIOR FILING DATE: 2001-03-27  
; NUMBER OF SEQ ID NOS: 74  
; SOFTWARE: Patent in version 3.0  
; SEQ ID NO 3  
; LENGTH: 228  
; TYPE: PRT  
; ORGANISM: Drosophila melanogaster  
US-10-080-980-3

Query Match 23.9%; Score 150.5; DB 14; Length 228;  
Best Local Similarity 49.2%; Pred. No. 7.6e-09;  
Matches 29; Conservative 12; Mismatches 17; Indels 1; Gaps 1;

Qy 50 PEVPLNIGGAHPTTSLRCYEDTDLAAMF-SGRHYIPTDSRGYFIDRDGTHFGYV 107  
Db 2 PEIILNVGVSYYTTLATLLQDKSTLILAEFGGRSLANDSKGRYFLDRDGVLFYI 60

RESULT 10

US-10-086-156-2  
; Sequence 2, Application US/10086156  
; Publication No. US20030054989A1  
; GENERAL INFORMATION:  
; APPLICANT: Bristol-Myers Squibb Company  
; TITLE OF INVENTION: POLYNUCLEOTIDE ENCODING TWO NOVEL HUMAN POTASSIUM CHANNEL BETA-S  
; TITLE OF INVENTION: K+beta4 and K+betams  
; FILE REFERENCE: D0115NP  
; CURRENT APPLICATION NUMBER: US/10/086,156  
; CURRENT FILING DATE: 2002-02-28  
; PRIOR APPLICATION NUMBER: US 60/272,190  
; PRIOR FILING DATE: 2001-02-28  
; PRIOR APPLICATION NUMBER: US 60/274,258  
; PRIOR FILING DATE: 2001-03-07  
; NUMBER OF SEQ ID NOS: 98  
; SOFTWARE: Patent in version 3.0  
; SEQ ID NO 2  
; LENGTH: 351  
; TYPE: PRT  
; ORGANISM: homo sapiens  
US-10-086-156-2

Query Match 23.6%; Score 149; DB 14; Length 351;  
Best Local Similarity 34.2%; Pred. No. 2e-08;  
Matches 40; Conservative 17; Mismatches 40; Indels 20; Gaps 3;

Qy 3 VVTCREPDSPRQDGMSSSDAS---DDELPATPTATQAGHALPQLPQEPPEVPLNIG 58  
Db 54 VMHGRDGSVTHGTQVQLSDTRFSCREGILLPATQSPAMS-----DPTILNVG 101

Qy 59 GAHPTTSLRCYEDTDLAAMFSGRHGYIPTDSRGYFIDRDGTHFGYVSPSTINFV 115  
Db 102 GKUFTTSLATLSFPDMLGAMFSGKMPYKRSQGNCFIDRDGKVFYI----LNFL 154

RESULT 11

US-10-296-115-1392  
; Sequence 1392, Application US/10296115  
; Publication No. US20040053248A1  
; GENERAL INFORMATION:  
; APPLICANT: Hyseq Inc  
; TITLE OF INVENTION: No. US20040053248A1e1 Nucleic Acids and Polypeptides  
; FILE REFERENCE: 784PCT  
; CURRENT APPLICATION NUMBER: US/10/296,115  
; CURRENT FILING DATE: 2002-11-18  
; PRIOR APPLICATION NUMBER: US09/488,725  
; PRIOR FILING DATE: 2000-01-21  
; PRIOR APPLICATION NUMBER: US09/552,317  
; PRIOR FILING DATE: 2000-04-25  
; NUMBER OF SEQ ID NOS: 1478  
; SEQ ID NO 1392  
; LENGTH: 282  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-10-296-115-1392

Query Match 23.3%; Score 147; DB 12; Length 282;  
Best Local Similarity 38.6%; Pred. No. 2.5e-08;  
Matches 34; Conservative 14; Mismatches 24; Indels 16; Gaps 2;

Qy 28 LEPATPTATQAGHALPQLPQEPPEVPLNIGGAHPTTSLRCYEDTDLAAMFSGRHGYI 87  
Db 15 LLPATQSPAMS-----DPTILNVGKLYTSLATLSFPDMLGAMFSGKMP 62  
Qy 88 PTDSEGRYFIDRDGTHFGYVSPSTINFV 115  
Db 63 KRDSQGNCFIDRDGKVFYI----LNFL 86

RESULT 12

US-10-086-156-12  
; Sequence 12, Application US/10086156  
; Publication No. US20030054989A1  
; GENERAL INFORMATION:  
; APPLICANT: Bristol-Myers Squibb Company  
; TITLE OF INVENTION: POLYNUCLEOTIDE ENCODING TWO NOVEL HUMAN POTASSIUM CHANNEL BETA-S  
; TITLE OF INVENTION: K+beta4 and K+betams  
; FILE REFERENCE: D0115NP  
; CURRENT APPLICATION NUMBER: US/10/086,156  
; CURRENT FILING DATE: 2002-02-28  
; PRIOR APPLICATION NUMBER: US 60/272,190  
; PRIOR FILING DATE: 2001-02-28  
; PRIOR APPLICATION NUMBER: US 60/274,258  
; PRIOR FILING DATE: 2001-03-07  
; NUMBER OF SEQ ID NOS: 98  
; SOFTWARE: Patent in version 3.0  
; SEQ ID NO 12  
; LENGTH: 99  
; TYPE: PRT  
; ORGANISM: homo sapiens  
US-10-086-156-12

Query Match 23.1%; Score 146; DB 14; Length 99;  
Best Local Similarity 47.6%; Pred. No. 8.3e-09;  
Matches 30; Conservative 11; Mismatches 18; Indels 4; Gaps 1;

Qy 53 VPLNIGGAHPTTSLRCYEDTDLAAMFSGRHGYIPTDSRGYFIDRDGTHFGYVSPSTI 112  
Db 3 ITLNVGKLYTSLATLSFPDMLGAMFSGKMPYKRSQGNCFIDRDGKVFYI----L 58  
Qy 113 NFV 115

```
; PRIOR APPLICATION NUMBER: US 60/236,359
; PRIOR FILING DATE: 2000-09-27
; PRIOR APPLICATION NUMBER: PCT/US01/00666
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00667
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00664
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00669
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00665
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00668
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00663
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00662
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00661
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00670
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: US 60/234,687
; PRIOR FILING DATE: 2000-09-21
; PRIOR APPLICATION NUMBER: US 09/608,408
; PRIOR FILING DATE: 2000-06-30
; PRIOR APPLICATION NUMBER: US 09/774,203
; PRIOR FILING DATE: 2001-01-29
; NUMBER OF SEQ ID NOS: 49117
; SOFTWARE: Anomax Sequence Listing Engine vers. 1.1
; SEQ ID NO 34673
; LENGTH: 56
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: MAP TO AC006001.2
; OTHER INFORMATION: EXPRESSED IN PLACENTA, SIGNAL = 4.6
; OTHER INFORMATION: EXPRESSED IN HELA, SIGNAL = 12
; OTHER INFORMATION: EXPRESSED IN HEART, SIGNAL = 5.4
; OTHER INFORMATION: EXPRESSED IN BONE MARROW, SIGNAL = 4.8
; OTHER INFORMATION: EXPRESSED IN BRAIN, SIGNAL = 7.3
; OTHER INFORMATION: EXPRESSED IN BT47A, SIGNAL = 14
; OTHER INFORMATION: EXPRESSED IN HEL100, SIGNAL = 8.5
; OTHER INFORMATION: EXPRESSED IN LUNG, SIGNAL = 5.5
; OTHER INFORMATION: EXPRESSED IN ADULT LIVER, SIGNAL = 2.4
; OTHER INFORMATION: EXPRESSED IN FETAL LIVER, SIGNAL = 6.4
; OTHER INFORMATION: EST HUMAN HIT: A1674184.1, EVALUE 4.00e-28
; OTHER INFORMATION: SWISSPROT HIT: Q13829, EVALUE 9.00e-07
; US-09-864-761-34673

Query Match      48.3%; Score 305; DB 9; Length 56;
Best Local Similarity 100.0%; Pred. No. 2.4e-27;
Matches 56; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      49  FPEVPLNIGGAHFTLRSLTLCYEDTMAAMFSGRHYIPTDSRGYPIDRDGTHP 104
Db      1  FPEVPLNIGGAHFTLRSLTLCYEDTMAAMFSGRHYIPTDSRGYPIDRDGTHP 56

RESULT 6
US-10-086-156-39
; Sequence 39; Application US/10086156
; Publication No. US20030054989A1
; GENERAL INFORMATION:
; APPLICANT: Bristol-Myers Squibb Company
; TITLE OF INVENTION: POLYNUCLEOTIDE ENCODING TWO NOVEL HUMAN POTASSIUM CHANNEL BETA-SUB
; TITLE OF INVENTION: K-betaM4 and K-betaM5
; FILE REFERENCE: D0115NP
; CURRENT APPLICATION NUMBER: US/10/086,156
; CURRENT FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: US 60/272,190
; PRIOR FILING DATE: 2001-02-28
; PRIOR APPLICATION NUMBER: US 60/274,258
```

```
; PRIOR FILING DATE: 2001-03-07
; NUMBER OF SEQ ID NOS: 98
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 39
; LENGTH: 96
; TYPE: PRT
; ORGANISM: homo sapiens
; US-10-086-156-39

Query Match      47.9%; Score 302.5; DB 14; Length 96;
Best Local Similarity 85.7%; Pred. No. 9.3e-27;
Matches 60; Conservative 3; Mismatches 2; Indels 5; Gaps 2;

Qy      51  KVEPLNIGGAHFTLRSLTLCYEDTMAAMFSGRHYIPTDSRGYPIDRDGTHGYVSPS 110
Db      1  EVFELNIGGAHFTLRSLTLCYEDTMAAMFSGRHYIPTDSRGYPIDRDGTHGDEV--- 57

Qy      111  TINFVLVAGD 120
Db      58  -LNF-LRSGD 65

RESULT 7
US-10-296-115-757
; Sequence 757; Application US/10296115
; Publication No. US20040053248A1
; GENERAL INFORMATION:
; APPLICANT: Hyseq Inc
; TITLE OF INVENTION: No. US20040053248A1el Nucleic Acids and Polypeptides
; FILE REFERENCE: 784PCT
; CURRENT APPLICATION NUMBER: US/10/296,115
; CURRENT FILING DATE: 2002-11-18
; PRIOR APPLICATION NUMBER: US09/488,725
; PRIOR FILING DATE: 2000-01-21
; PRIOR APPLICATION NUMBER: US09/552,317
; PRIOR FILING DATE: 2000-04-25
; NUMBER OF SEQ ID NOS: 1478
; SEQ ID NO 757
; LENGTH: 130
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-10-296-115-757

Query Match      34.9%; Score 220.5; DB 12; Length 130;
Best Local Similarity 78.3%; Pred. No. 3.5e-17;
Matches 47; Conservative 1; Mismatches 11; Indels 1; Gaps 1;

Qy      1  MVVVTGRRPDSRRQDGMSSSDAEDDFLEPATPTATGCHAL-PLLQPEFVPLNIGG 59
Db      23  MVVVTGRRPDSRRQDGMSSSDAEDDFLEPATPTATGCHALPPAATGSLRLPLTSEG 82

RESULT 8
US-10-056-884-5
; Sequence 5; Application US/10056884
; Publication No. US20030032786A1
; GENERAL INFORMATION:
; APPLICANT: Bristol-Myers Squibb Company
; TITLE OF INVENTION: POLYNUCLEOTIDE ENCODING A NOVEL HUMAN POTASSIUM CHANNEL BETA-SUBU
; TITLE OF INVENTION: K-betaM2
; FILE REFERENCE: D0076 NP
; CURRENT APPLICATION NUMBER: US/10/056,884
; CURRENT FILING DATE: 2002-01-24
; PRIOR APPLICATION NUMBER: US 60/263,872
; PRIOR FILING DATE: 2001-01-24
; PRIOR APPLICATION NUMBER: US 60/269,794
; PRIOR FILING DATE: 2001-02-14
; NUMBER OF SEQ ID NOS: 73
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 5
; LENGTH: 228
; TYPE: PRT
; ORGANISM: Drosophila melanogaster
```

```

US-10-094-749-2684
; Sequence 2684, Application US/10094749
; Publication No. US20030219741A1
; GENERAL INFORMATION:
; APPLICANT: ISOGAI, TAKAO
; APPLICANT: SUGIYAMA, TOMOYASU
; APPLICANT: OTSUKI, TETSUJI
; APPLICANT: WAKAMATSU, AI
; APPLICANT: SATO, HIROYUKI
; APPLICANT: ISHII, SHIZUKO
; APPLICANT: YAMAMOTO, JUN-ICHI
; APPLICANT: ISONO, YUUKO
; APPLICANT: HIO, YURI
; APPLICANT: OTSUKA, KAORU
; APPLICANT: NAGAI, KEIICHI
; APPLICANT: IRIE, RYOTARO
; APPLICANT: TAMECHIKI, ICHIRO
; APPLICANT: SEKI, NAOHICO
; APPLICANT: YOSHIKAWA, TSUTOMU
; APPLICANT: OTSUKA, MOTOKYUKI
; APPLICANT: NAGAHARI, KENJI
; APPLICANT: MASUHO, YASUHIKO
; TITLE OF INVENTION: NOVEL FULL-LENGTH cDNA
; FILE REFERENCE: 084335/0160
; CURRENT APPLICATION NUMBER: US/10/094,749
; PRIOR FILING DATE: 2002-03-12
; PRIOR APPLICATION NUMBER: 60/350,435
; PRIOR FILING DATE: 2002-01-24
; PRIOR APPLICATION NUMBER: JP 2001-328381
; PRIOR FILING DATE: 2001-09-14
; NUMBER OF SEQ ID NOS: 3381
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 2684
; LENGTH: 289
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-094-749-2684

Query Match      88.8%; Score 560.5; DB 15; Length 289;
Best Local Similarity 91.7%; Pred. No. 1.1e-55;
Matches 110; Conservative 3; Mismatches 2; Indels 5; Gaps 2;

QY 1 M V V T G R P D S R Q D G A M S S D A E D D F L E P A T T A T Q A G H A L P L L P Q E F P E V V P L N I G G A 60
DB 1 M V V T G R P D S R Q D G A M S S D A E D D F L E P A T T A T Q A G H A L P L L P Q E F P E V V P L N I G G A 60
QY 61 H P T T R L S T L R C Y E D T M L A A M F S G R H Y I P T D S E G R Y F I D R D G T H F G D V L A G D 120
DB 61 H P T T R L S T L R C Y E D T M L A A M F S G R H Y I P T D S E G R Y F I D R D G T H F G D V L A G D 120
QY 61 H P T T R L S T L R C Y E D T M L A A M F S G R H Y I P T D S E G R Y F I D R D G T H F G D V L A G D 120
DB 61 H P T T R L S T L R C Y E D T M L A A M F S G R H Y I P T D S E G R Y F I D R D G T H F G D V L A G D 120

RESULT 3
US-10-086-156-24
; Sequence 24, Application US/10086156
; Publication No. US20030054989A1
; GENERAL INFORMATION:
; APPLICANT: Bristol-Myers Squibb Company
; TITLE OF INVENTION: POLYNUCLEOTIDE ENCODING TWO NOVEL HUMAN POTASSIUM CHANNEL BETA-SUBUNIT cDNAs
; FILE REFERENCE: D0115NP
; CURRENT APPLICATION NUMBER: US/10/086,156
; CURRENT FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: US 60/272,190
; PRIOR FILING DATE: 2001-02-28
; PRIOR APPLICATION NUMBER: US 60/274,258
; PRIOR FILING DATE: 2001-03-07
; NUMBER OF SEQ ID NOS: 98
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 24
; LENGTH: 343
; TYPE: PRT
; ORGANISM: homo sapiens
US-10-086-156-24

US-10-024-579-7
; Sequence 7, Application US/10024579
; Publication No. US20020119522A1
; GENERAL INFORMATION:
; APPLICANT: Fiddle, Carl Johan
; APPLICANT: Gerhardt, Brenda
; APPLICANT: Hilbun, Erin
; APPLICANT: Turner, C. Alexander Jr.
; TITLE OF INVENTION: No. US20020119522A1 Human Ion Channel-Related Proteins
; FILE REFERENCE: LEX-0274-USA
; CURRENT APPLICATION NUMBER: US/10/024,579
; CURRENT FILING DATE: 2001-12-18
; PRIOR APPLICATION NUMBER: US 60/258,595
; PRIOR FILING DATE: 2000-12-28
; NUMBER OF SEQ ID NOS: 17
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 7
; LENGTH: 106
; TYPE: PRT
; ORGANISM: homo sapiens
US-10-024-579-7

Query Match      61.0%; Score 385; DB 13; Length 106;
Best Local Similarity 97.3%; Pred. No. 3.7e-36;
Matches 71; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 48 E P E V V P L N I G A H P T T R L S T L R C Y E D T M L A A M F S G R H Y I P T D S E G R Y F I D R D G T H F G V 107
DB 48 E P E V V P L N I G A H P T T R L S T L R C Y E D T M L A A M F S G R H Y I P T D S E G R Y F I D R D G T H F G V 107
QY 108 S P S T I N F V V L A G D 120
DB 94 S P S T I N F V V L A G D 106

RESULT 4
US-10-024-579-7
; Sequence 7, Application US/10024579
; Publication No. US20020119522A1
; GENERAL INFORMATION:
; APPLICANT: Fiddle, Carl Johan
; APPLICANT: Gerhardt, Brenda
; APPLICANT: Hilbun, Erin
; APPLICANT: Turner, C. Alexander Jr.
; TITLE OF INVENTION: No. US20020119522A1 Human Ion Channel-Related Proteins
; FILE REFERENCE: LEX-0274-USA
; CURRENT APPLICATION NUMBER: US/10/024,579
; CURRENT FILING DATE: 2001-12-18
; PRIOR APPLICATION NUMBER: US 60/258,595
; PRIOR FILING DATE: 2000-12-28
; NUMBER OF SEQ ID NOS: 17
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 7
; LENGTH: 106
; TYPE: PRT
; ORGANISM: homo sapiens
US-10-024-579-7

Query Match      61.0%; Score 385; DB 13; Length 106;
Best Local Similarity 97.3%; Pred. No. 3.7e-36;
Matches 71; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 48 E P E V V P L N I G A H P T T R L S T L R C Y E D T M L A A M F S G R H Y I P T D S E G R Y F I D R D G T H F G V 107
DB 48 E P E V V P L N I G A H P T T R L S T L R C Y E D T M L A A M F S G R H Y I P T D S E G R Y F I D R D G T H F G V 107
QY 108 S P S T I N F V V L A G D 120
DB 94 S P S T I N F V V L A G D 106

RESULT 5
US-09-864-761-34673
; Sequence 34673, Application US/09864761
; Patent No. US20020048763A1
; GENERAL INFORMATION:
; APPLICANT: Penn, Sharron G.
; APPLICANT: Rank, David R.
; APPLICANT: Hanzel, David K.
; APPLICANT: Chen, Wensheng
; TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR GENE EXPRESSION ANALYSIS BY MICROARRAY
; FILE REFERENCE: Aecmca-X-1
; CURRENT APPLICATION NUMBER: US/09/864,761
; CURRENT FILING DATE: 2001-05-23
; PRIOR APPLICATION NUMBER: US 60/180,312
; PRIOR FILING DATE: 2000-02-04
; PRIOR APPLICATION NUMBER: US 60/207,456
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: US 09/632,366
; PRIOR FILING DATE: 2000-08-03
; PRIOR APPLICATION NUMBER: GB 24263.6
; PRIOR FILING DATE: 2000-10-04

```

GenCore version 5.1.6  
Copyright (c) 1993 - 2004 Compugen Ltd.

OM protein - protein search, using sw model

Run on: June 8, 2004, 10:50:19 ; Search time 959 Seconds  
(without alignments)  
35.204 Million cell updates/sec

Title: US-10-024-579-5  
Perfect score: 631  
Sequence: 1 MVVVTGEPDSRRDGMSS.....GTHFGYVSPSTINPVLGAD 120

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 1155919 seqs, 281338677 residues

Total number of hits satisfying chosen parameters: 1155919

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

- Database : Published Applications AA:\*
- 1: /cgn2\_6/ptodata/2/pubpaa/US07\_PUBCOMB.pep:\*
  - 2: /cgn2\_6/ptodata/2/pubpaa/PCT\_NEW\_PUB.pep:\*
  - 3: /cgn2\_6/ptodata/2/pubpaa/US06\_NEW\_PUB.pep:\*
  - 4: /cgn2\_6/ptodata/2/pubpaa/US06\_PUBCOMB.pep:\*
  - 5: /cgn2\_6/ptodata/2/pubpaa/US07\_NEW\_PUB.pep:\*
  - 6: /cgn2\_6/ptodata/2/pubpaa/PCTUS\_PUBCOMB.pep:\*
  - 7: /cgn2\_6/ptodata/2/pubpaa/US08\_NEW\_PUB.pep:\*
  - 8: /cgn2\_6/ptodata/2/pubpaa/US08\_PUBCOMB.pep:\*
  - 9: /cgn2\_6/ptodata/2/pubpaa/US09A\_PUBCOMB.pep:\*
  - 10: /cgn2\_6/ptodata/2/pubpaa/US09B\_PUBCOMB.pep:\*
  - 11: /cgn2\_6/ptodata/2/pubpaa/US09C\_PUBCOMB.pep:\*
  - 12: /cgn2\_6/ptodata/2/pubpaa/US09\_NEW\_PUB.pep:\*
  - 13: /cgn2\_6/ptodata/2/pubpaa/US10A\_PUBCOMB.pep:\*
  - 14: /cgn2\_6/ptodata/2/pubpaa/US10B\_PUBCOMB.pep:\*
  - 15: /cgn2\_6/ptodata/2/pubpaa/US10C\_PUBCOMB.pep:\*
  - 16: /cgn2\_6/ptodata/2/pubpaa/US10\_NEW\_PUB.pep:\*
  - 17: /cgn2\_6/ptodata/2/pubpaa/US60\_NEW\_PUB.pep:\*
  - 18: /cgn2\_6/ptodata/2/pubpaa/US60\_PUBCOMB.pep:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	631	100.0	120	13	US-10-024-579-5
2	560.5	88.8	289	15	US-10-094-749-2684
3	560.5	88.8	343	14	US-10-086-156-24
4	385	61.0	106	13	US-10-024-579-7
5	305	48.3	56	9	US-09-864-761-34673
6	302.5	47.9	96	14	US-10-086-156-39
7	220.5	34.9	130	12	US-10-296-115-757
8	150.5	23.9	228	14	US-10-056-884-5
9	150.5	23.9	228	14	US-10-080-980-3
10	149	23.6	351	12	US-10-086-156-2
11	147	23.3	282	12	US-10-296-115-1392
12	146	23.1	99	14	US-10-086-156-12
13	146	23.1	237	14	US-10-040-805-3
14	146	23.1	237	14	US-10-056-884-4
15	146	23.1	237	14	US-10-080-980-7

16	146	23.1	237	14	US-10-080-980-9	Sequence 9, Appli
17	146	23.1	237	14	US-10-121-746-25	Sequence 25, Appl
18	146	23.1	237	14	US-10-086-156-3	Sequence 2, Appli
19	146	23.1	237	14	US-10-071-458-6	Sequence 6, Appli
20	146	23.1	237	14	US-10-234-951A-3	Sequence 3, Appli
21	146	23.1	237	14	US-10-264-171-3	Sequence 3, Appli
22	143.5	22.7	321	12	US-10-425-114-65440	Sequence 65440, A
23	142	22.5	301	14	US-10-056-884-67	Sequence 67, Appl
24	142	22.5	301	14	US-10-080-980-65	Sequence 65, Appl
25	142	22.5	301	14	US-10-086-156-27	Sequence 27, Appl
26	142	22.5	301	14	US-10-071-458-28	Sequence 28, Appl
27	142	22.5	301	14	US-10-234-951A-63	Sequence 63, Appl
28	140.5	22.3	329	14	US-10-287-218-18	Sequence 18, Appl
29	139	22.0	301	12	US-10-276-774-2342	Sequence 2342, Ap
30	139	22.0	428	14	US-10-056-884-2	Sequence 2, Appli
31	139	22.0	435	14	US-10-080-980-4	Sequence 4, Appli
32	138.5	21.9	146	12	US-10-276-774-2635	Sequence 2635, Ap
33	138.5	21.9	313	14	US-10-086-156-26	Sequence 26, Appl
34	138.5	21.9	322	15	US-10-094-749-2845	Sequence 2845, Ap
35	136	21.6	175	9	US-09-925-299-879	Sequence 879, App
36	136	21.6	175	10	US-09-925-299-879	Sequence 879, App
37	136	21.6	197	14	US-10-106-698-4675	Sequence 4675, Ap
38	136	21.6	234	15	US-10-094-749-2264	Sequence 2264, Ap
39	136	21.6	255	14	US-10-040-805-2	Sequence 2, Appli
40	136	21.6	255	14	US-10-168-651-4	Sequence 4, Appli
41	136	21.6	255	14	US-10-264-171-2	Sequence 2, Appli
42	134	21.2	302	12	US-10-424-599-196818	Sequence 196818,
43	132	20.9	225	14	US-10-086-156-25	Sequence 25, Appl
44	127.5	20.2	325	14	US-10-080-980-2	Sequence 2, Appli
45	125	19.8	258	14	US-10-121-746-12	Sequence 12, Appl

ALIGNMENTS

RESULT 1  
US-10-024-579-5  
; Sequence 5, Application US/10024579  
; Publication No. US20020119522A1  
; GENERAL INFORMATION:  
; APPLICANT: Friddle, Carl Johan  
; APPLICANT: Gerhardt, Brenda  
; APPLICANT: Hilbun, Erin  
; APPLICANT: Turner, C. Alexander Jr.  
; TITLE OF INVENTION: No. US20020119522A1 Human Ion Channel-Related Proteins  
; TITLE OF INVENTION: and Polynucleotides Encoding the Same  
; FILE REFERENCE: LEX-0274-USA  
; CURRENT APPLICATION NUMBER: US/10/024,579  
; CURRENT FILING DATE: 2001-12-18  
; PRIOR APPLICATION NUMBER: US 60/258,595  
; PRIOR FILING DATE: 2000-12-28  
; NUMBER OF SEQ ID NOS: 17  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 5  
; LENGTH: 120  
; TYPE: PRT  
; ORGANISM: homo sapiens  
US-10-024-579-5

Query Match	100.0%;	Score 631;	DB 13;	Length 120;
Best Local Similarity	100.0%;	Pred. No. 2.9e-64;		
Matches 120;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0;
Qy	1	MVVVTGEPDSRRDGMSSDAEDDELEPATATATGAGHALPILPOEFVPEVPLNIGGA	60	
Db	1	MVVVTGEPDSRRDGMSSDAEDDELEPATATATGAGHALPILPOEFVPEVPLNIGGA	60	
Qy	61	HFTRTLSTLCYEDTMLAAMFSGRHYIPTDSEGRFYFIDRDGTHFGYVSPSTINPVLGAD	120	
Db	61	HFTRTLSTLCYEDTMLAAMFSGRHYIPTDSEGRFYFIDRDGTHFGYVSPSTINPVLGAD	120	

RESULT 2



```
; FILE REFERENCE: GENSET.054PR2
; CURRENT APPLICATION NUMBER: US/09/621,976
; CURRENT FILING DATE: 2000-07-21
; NUMBER OF SEQ ID NOS: 19335
; SOFTWARE: Patent.pm
; SEQ ID NO 5196
; LENGTH: 93
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-621-976-5196

Query Match      21.9%; Score 138.5; DB 4; Length 93;
Best Local Similarity 56.4%; Pred. No. 1.2e-09;
Matches 31; Conservative 6; Mismatches 17; Indels 1; Gaps 1;

QY 53 VPLNIGGAHFTTSLRCYEDTMLAAMFSGRHYIPTDSEGRYFIDRDGTHFGYV 107
DB 34 VLNUGGALYTTMQTL-TQDMLXAMFSGRMEVLTDSGWLIDRCGRHGTI 87

RESULT 3
US-09-336-643A-12
; Sequence 12, Application US/09336643A
; Patent No. 6399761
; GENERAL INFORMATION:
; APPLICANT: Miller, Andrew P.
; APPLICANT: Curran, Mark Edward
; APPLICANT: Hu, Ping
; APPLICANT: Rutter, Marc
; APPLICANT: Wang, Jian-Wang
; TITLE OF INVENTION: No. 6399761el Human Potassium Channels
; FILE REFERENCE: SEQ-15P
; CURRENT APPLICATION NUMBER: US/09/336,643A
; CURRENT FILING DATE: 1999-06-18
; PRIOR FILING DATE: 1998-08-07
; PRIOR APPLICATION NUMBER: 60/076,687
; PRIOR FILING DATE: 1999-01-19
; PRIOR APPLICATION NUMBER: PCT/US99/03826
; PRIOR FILING DATE: 1999-02-22
; NUMBER OF SEQ ID NOS: 87
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 258
; TYPE: PRT
; ORGANISM: H. sapiens
US-09-336-643A-12

Query Match      19.8%; Score 125; DB 4; Length 258;
Best Local Similarity 40.6%; Pred. No. 2.3e-07;
Matches 26; Conservative 13; Mismatches 21; Indels 4; Gaps 1;

QY 52 VPLNIGGAHFTTSLRCYEDTMLAAMFSGRHYIPTDSEGRYFIDRDGTHFGYVSPST 111
DB 34 LMTLVGGYLXITQKQTLTKYPTFLEGIYNGKILCPFDADGHYFIDRDGLLFRHV---- 89

QY 112 INFV 115
DB 90 LNFL 93

RESULT 4
US-09-673-395A-155
; Sequence 155, Application US/09673395A
; Patent No. 6620923
; GENERAL INFORMATION:
; APPLICANT: SPECHT, THOMAS
; APPLICANT: HINZMANN, BERND
; APPLICANT: SCHMITT, ARMIN
; APPLICANT: PILARSKI, CHRISTIAN
; APPLICANT: DAHL, EDGAR
; APPLICANT: ROSENTHAL, ANDRE
; TITLE OF INVENTION: HUMAN NUCLEIC ACID SEQUENCES FROM UTERUS TUMOR TISSUE
```

```
; FILE REFERENCE: ALBRE-12
; CURRENT APPLICATION NUMBER: US/09/673,395A
; CURRENT FILING DATE: 2000-10-17
; NUMBER OF SEQ ID NOS: 637
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 155
; LENGTH: 289
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-673-395A-155

Query Match      18.8%; Score 118.5; DB 4; Length 289;
Best Local Similarity 36.7%; Pred. No. 1.7e-06;
Matches 33; Conservative 12; Mismatches 38; Indels 7; Gaps 3;

QY 29 EPATPTTA-TQAGHALPLLPOEPP--EYVPLNIGGAHFTTSLRCYEDTMLAAMFSGRH 85
DB 2 QPARPGMAAATAAAGVPSRGPGEVHLNMGKRFSQTTLTWIPDSFSSLGRI 61

QY 86 VIPTDSEGRYFIDRDGTHFGYVSPSTINFV 115
DB 62 STLKDETGAIFIDRDPTVFAPL-----LNFL 87

RESULT 5
US-09-336-643A-14
; Sequence 14, Application US/09336643A
; Patent No. 6399761
; GENERAL INFORMATION:
; APPLICANT: Miller, Andrew P.
; APPLICANT: Curran, Mark Edward
; APPLICANT: Hu, Ping
; APPLICANT: Rutter, Marc
; APPLICANT: Wang, Jian-Wang
; TITLE OF INVENTION: No. 6399761el Human Potassium Channels
; FILE REFERENCE: SEQ-15P
; CURRENT APPLICATION NUMBER: US/09/336,643A
; CURRENT FILING DATE: 1999-06-18
; PRIOR FILING DATE: 1999-06-18
; PRIOR APPLICATION NUMBER: 60/076,687
; PRIOR FILING DATE: 1998-08-07
; PRIOR APPLICATION NUMBER: 60/116,448
; PRIOR FILING DATE: 1999-01-19
; PRIOR APPLICATION NUMBER: PCT/US99/03826
; PRIOR FILING DATE: 1999-02-22
; NUMBER OF SEQ ID NOS: 87
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 14
; LENGTH: 256
; TYPE: PRT
; ORGANISM: H. sapiens
; FEATURE:
; NAME/KEY: VARIANT
; LOCATION: (1)...(256)
; OTHER INFORMATION: Xaa = Any Amino Acid
US-09-336-643A-14

Query Match      18.1%; Score 114; DB 4; Length 256;
Best Local Similarity 34.5%; Pred. No. 5.3e-06;
Matches 30; Conservative 16; Mismatches 35; Indels 6; Gaps 3;

QY 30 PATPTATQAGHALPLLPOEPPFVPLNIGGAHFTTSLRCYEDTMLAAMFSGRHYIPT 89
DB 10 PASPLXNQ-GIPTPAQLTKSNAPVHIDVGHHMTSSLATLTKYPESRIGRLFDGTEPIVL 68

QY 90 DS-EGRYFIDRDGTHFGYVSPSTINFV 115
DB 69 DSLKQHYFIDRDGQMFYI-----LNFL 91

RESULT 6
US-09-166-350-12
; Sequence 12, Application US/09166350A
; Patent No. 6440663
```

GenCore version 5.1.6  
Copyright (c) 1993 - 2004 Compugen Ltd.

OM protein - protein search, using sw model

Run on: June 8, 2004, 10:48:29 ; Search time 44 Seconds  
(without alignments)  
140.798 Million cell updates/sec

Title: US-10-024-579-5

Perfect score: 631

Sequence: 1 MVVTGREPSRRQDGAMSS.....GTHRGVYSPSTINPVLAGD 120

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 389414 seqs, 51625971 residues

Total number of hits satisfying chosen parameters: 389414

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

- Issued Patents AA.\*
- 1: /cgn2\_6/ptodata/2/iaa/5A\_COMB.pap.\*
- 2: /cgn2\_6/ptodata/2/iaa/5B\_COMB.pap.\*
- 3: /cgn2\_6/ptodata/2/iaa/6A\_COMB.pap.\*
- 4: /cgn2\_6/ptodata/2/iaa/6B\_COMB.pap.\*
- 5: /cgn2\_6/ptodata/2/iaa/PTUS\_COMB.pap.\*
- 6: /cgn2\_6/ptodata/2/iaa/backfiles1.pap.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query		DB ID	Description
		Match	Length		
1	146	23.1	237	4	US-09-336-643A-25
2	138.5	21.9	93	4	US-09-621-976-5196
3	125	19.8	258	4	US-09-336-643A-12
4	118.5	18.8	289	4	US-09-673-395A-155
5	114	18.1	256	4	US-09-336-643A-14
6	107	17.0	812	4	US-09-166-350-12
7	90	14.3	162	2	US-08-606-143-44
8	88.5	14.0	389	4	US-09-336-643A-27
9	85.5	13.5	646	4	US-09-336-643A-10
10	85	13.5	616	4	US-09-275-252A-4
11	85	13.5	636	4	US-09-142-791A-2
12	85	13.5	636	4	US-09-142-791A-6
13	85	13.5	636	4	US-09-178-109-4
14	85	13.5	655	4	US-09-142-791A-4
15	85	13.5	655	4	US-09-178-109-2
16	84.5	13.4	111	4	US-10-162-012-11
17	81.5	12.9	152	2	US-08-606-143-4
18	81	12.8	159	2	US-08-606-143-45
19	79	12.5	1495	4	US-08-522-726B-1
20	79	12.5	1495	4	US-09-337-384-1
21	77.5	12.3	495	4	US-09-275-252A-5
22	76	12.0	152	2	US-08-606-143-13
23	74.5	11.8	446	4	US-10-162-012-8
24	73	11.6	528	2	US-08-527-152-2
25	71	11.3	150	2	US-08-606-143-29
26	71	11.3	861	4	US-09-784-316-2
27	70.5	11.2	922	2	US-08-464-402-2

28	70.5	11.2	922	3	US-09-054-775C-2
29	70	11.1	152	2	US-08-606-143-21
30	69.5	11.0	152	2	US-08-606-143-6
31	69.5	11.0	152	2	US-08-606-143-9
32	69.5	11.0	152	2	US-08-606-143-12
33	69.5	11.0	152	2	US-08-606-143-32
34	69.5	11.0	155	2	US-08-606-143-8
35	69.5	11.0	155	2	US-08-606-143-23
36	69	10.9	198	4	US-09-252-991A-19442
37	68.5	10.9	152	2	US-08-606-143-7
38	68.5	10.9	152	2	US-08-606-143-16
39	68.5	10.9	152	2	US-08-606-143-25
40	68.5	10.9	152	2	US-08-606-143-28
41	68.5	10.9	152	2	US-08-606-143-30
42	68	10.8	499	4	US-09-336-643A-8
43	67.5	10.7	152	2	US-08-606-143-10
44	67.5	10.7	152	2	US-08-606-143-15
45	67.5	10.7	152	2	US-08-606-143-20

ALIGNMENTS

RESULT 1  
US-09-336-643A-25  
; Sequence 25, Application US/09336643A  
; Patent No. 6399761  
; GENERAL INFORMATION:  
; APPLICANT: Miller, Andrew P.  
; APPLICANT: Curran, Mark Edward  
; APPLICANT: Hu, Ping  
; APPLICANT: Rutter, Marc  
; APPLICANT: Wang, Jian-Wang  
; TITLE OF INVENTION: No. 6399761el Human Potassium Channels  
; FILE REFERENCE: SEQ-15P  
; CURRENT APPLICATION NUMBER: US/09/336.643A  
; CURRENT FILING DATE: 1999-06-18  
; PRIOR APPLICATION NUMBER: 60/076,687  
; PRIOR FILING DATE: 1998-08-07  
; PRIOR APPLICATION NUMBER: 60/116,448  
; PRIOR FILING DATE: 1999-01-19  
; PRIOR APPLICATION NUMBER: PCT/US99/03826  
; PRIOR FILING DATE: 1999-02-22  
; NUMBER OF SEQ ID NOS: 87  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 25  
; LENGTH: 237  
; TYPE: PRT  
; ORGANISM: H. sapiens  
US-09-336-643A-25

Query Match 23.1%; Score 146; DB 4; Length 237;  
Best Local Similarity 50.8%; Pred.No. 5.1e-10;  
Matches 32; Conservative 7; Mismatches 20; Indels 4; Gaps 1;

QY	53	VPLNIGCAHFTLRSLTLCYEDTMLAAMFSGRHVYPTDSEGRYFIDRGTGTHGVYSPSTI	112
Db	14	VTLVNGGHLTTSITLTITRYPDSMLGMFGDPTARDPGNYFIDRDGPLFRVY---	69
QY	113	NFV 115	
Db	70	NFL 72	

RESULT 2  
US-09-621-976-5196  
; Sequence 5196, Application US/09621976  
; Patent No. 6639063  
; GENERAL INFORMATION:  
; APPLICANT: Dumas Milne Edwards, J.B.  
; APPLICANT: Jobert, S.  
; APPLICANT: Giordano, J.Y.  
; TITLE OF INVENTION: ESTs and Encoded Human Proteins.

XX

Search completed: June 8, 2004, 10:50:13  
Job time : 100 secs

measuring human gene expression in a sample derived from human adult liver, comprising one of 13109 defined nucleotide sequences given in the specification (or complements/fragments). The probe hybridises at high stringency to a nucleic acid molecule expressed in the human adult liver. (1) may be used for predicting, measuring and displaying gene expression in samples derived from human adult liver. The genes identified may be involved in genetic liver diseases such as cirrhosis, hyperlipoproteinaemia, hyperlipidaemia and hypercholesterolaemia which are associated with coronary heart disease. ABG47348-ABG59930 represent human liver single exon encoded peptides of the invention. Note: The sequence information for this patent does not appear in the printed specification but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 56 AA;

Query Match 48.3%; Score 305; DB 4; Length 56;  
Best Local Similarity 100.0%; Pred. No. 3e-28;  
Matches 56; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 49 PFEVPLNIGGAHFTTLLSTLCRYEDTMAAMFSGRHYIPTDSEGRYFIDRDGTHF 104  
Db 1 PFEVPLNIGGAHFTTLLSTLCRYEDTMAAMFSGRHYIPTDSEGRYFIDRDGTHF 56

#### RESULT 13

AA02689  
ID AA02689 standard; protein; 56 AA.

XX AC AA02689;

XX DT 09-OCT-2001 (first entry)

XX DE Peptide #1371 encoded by probe for measuring breast gene expression.

XX KW Probe; human; breast disease; breast cancer; development disorder;

XX KW inflammatory disease; proliferative breast disease; non-carcinoma tumour.

XX OS Homo sapiens.

XX FN WO200157270-A2.

XX PD 09-AUG-2001.

XX PP 29-JAN-2001; 2001WO-US000661.

XX PR 04-FEB-2000; 2000US-0180312P.

XX PR 26-MAY-2000; 2000US-0207456P.

XX PR 30-JUN-2000; 2000US-00608408.

XX PR 03-AUG-2000; 2000US-00632366.

XX PR 21-SEP-2000; 2000US-0234687P.

XX PR 27-SEP-2000; 2000US-0236359P.

XX PR 04-OCT-2000; 2000GB-00024263.

XX PA (MOLE-) MOLECULAR DYNAMICS INC.

XX PI Penn SG, Hanzel DK, Chen W, Rank DR;

XX WPI; 2001-476286/51.

XX PT Novel single exon nucleic acid probe used to measuring gene expression in a human breast.

XX PS Claim 27; SEQ ID NO 11429; 322pp; English.

XX CC The present invention relates to novel single exon nucleic acid probes (see A10010-A110067). The present sequence is a peptide encoded by one such probe. The probes are useful for measuring human gene expression in a human breast sample, where the probe hybridises at high stringency to a nucleic acid expressed in the human breast. The probes are useful for predicting, diagnosing, grading, staging, monitoring and prognosing diseases of the human breast, particularly those diseases with polygenic aetiology. The diseases include: breast cancer, disorders of development,

inflammatory diseases of the breast, fibrocystic changes, proliferative breast disease and non-carcinoma tumours. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 56 AA;

Query Match 48.3%; Score 305; DB 4; Length 56;

Best Local Similarity 100.0%; Pred. No. 3e-28;

Matches 56; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 49 PFEVPLNIGGAHFTTLLSTLCRYEDTMAAMFSGRHYIPTDSEGRYFIDRDGTHF 104

Db 1 PFEVPLNIGGAHFTTLLSTLCRYEDTMAAMFSGRHYIPTDSEGRYFIDRDGTHF 56

#### RESULT 14

ABG36762

ID ABG36762 standard; peptide; 56 AA.

XX AC ABG36762;

XX DT 19-AUG-2002 (first entry)

XX DE Human peptide encoded by genome-derived single exon probe SEQ ID 26427.

XX KW Human; single exon probe; asthma; lung cancer; COPD; ILD;

XX KW chronic obstructive pulmonary disease; interstitial lung disease;

XX KW familial idiopathic pulmonary fibrosis; neurofibromatosis;

XX KW tuberous sclerosis; Gaucher's disease; Niemann-Pick disease;

XX KW Hermansky-Pudlak syndrome; sarcoidosis; pulmonary haemosiderosis;

XX KW pulmonary histiocytosis; lymphangioleiomyomatosis; Karagenen syndrome;

XX KW pulmonary alveolar proteinosis; fibrocystic pulmonary dysplasia;

XX KW primary ciliary dyskinesia; pulmonary hypertension;

XX KW hyaline membrane disease.

XX OS Homo sapiens.

XX FN WO200186003-A2.

XX PD 15-NOV-2001.

XX PP 30-JAN-2001; 2001WO-US000665.

XX PR 04-FEB-2000; 2000US-0180312P.

XX PR 26-MAY-2000; 2000US-0207456P.

XX PR 30-JUN-2000; 2000US-00608408.

XX PR 03-AUG-2000; 2000US-00632366.

XX PR 21-SEP-2000; 2000US-0234687P.

XX PR 27-SEP-2000; 2000US-0236359P.

XX PR 04-OCT-2000; 2000GB-00024263.

XX PA (MOLE-) MOLECULAR DYNAMICS INC.

XX PI Penn SG, Hanzel DK, Chen W, Rank DR;

XX WPI; 2002-114183/15.

XX PT Spatially-addressable set of single exon nucleic acid probes, used to measure gene expression in human lung samples.

XX PS Claim 27; SEQ ID NO 26427; 634pp; English.

XX CC The invention relates to a spatially-addressable set of single exon nucleic acid probes for measuring gene expression in a sample derived from human lung comprising single exon nucleic acid probes having one of 12614 nucleic acid sequences mentioned in the specification, or their complements or the 12387 open reading frames derived from the 12614 probes. Also included are a microarray comprising the novel set of probes; the novel set of probes which hybridise at high stringency to a nucleic acid expressed in the human lung; measuring gene expression in a sample derived from human lung, comprising (a) contacting the array with a

```

XX OS Homo sapiens.
XX PN WO200157276-A2.
XX PD 09-AUG-2001.
XX PF 30-JAN-2001; 2001WO-US000668.
XX PR 04-FEB-2000; 2000US-0180312P.
XX PR 26-MAY-2000; 2000US-0207456P.
XX PR 30-JUN-2000; 2000US-00608408.
XX PR 03-AUG-2000; 2000US-00632366.
XX PR 21-SEP-2000; 2000US-0234687P.
XX PR 27-SEP-2000; 2000US-0236359P.
XX PR 04-OCT-2000; 2000GB-00024263.
XX PA (MOLE-) MOLECULAR DYNAMICS INC.
XX PI Penn SG, Hanzel DK, Chen W, Rank DR;
XX DR WPI; 2001-488900/53.
XX PT Human genome-derived single exon nucleic acid probes useful for analyzing
XX PT Gene expression in human bone marrow.
XX PS Example 4; SEQ ID NO 27408; 659pp + Sequence Listing; English.
XX CC The present invention provides a number of single exon nucleic acid
XX CC probes which are derived from genomic sequences expressed in the human
XX CC bone marrow. They can be used to measure gene expression in bone marrow
XX CC samples, which may enable the improved diagnosis and treatment of cancers
XX CC such as lymphoma, leukaemia and myeloma. The present sequence is a
XX CC protein encoded by one of the probes of the invention
XX SQ Sequence 56 AA;

Query Match 48.3%; Score 305; DB 4; Length 56;
Best Local Similarity 100.0%; Pred. No. 3e-28;
Matches 56; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

XX QY 49 FPEVPLNIGGAHFTTLRCYEDTMLAAMFSGRHYIPTDSEGRYFIDRDGTHF 104
XX DB 1 FPEVPLNIGGAHFTTLRCYEDTMLAAMFSGRHYIPTDSEGRYFIDRDGTHF 56

RESULT 11
ID AAM54702
AC AAM54702;
DT 05-NOV-2001 (first entry)
DE Human brain expressed single exon probe encoded protein SEQ ID NO: 26807.
XX KW Human; brain expressed exon; gene expression analysis; probe; microarray;
XX KW Alzheimer's disease; multiple sclerosis; schizophrenia; epilepsy; cancer.
XX OS Homo sapiens.
XX PN WO200157275-A2.
XX PD 09-AUG-2001.
XX PF 30-JAN-2001; 2001WO-US000667.
XX PR 04-FEB-2000; 2000US-0180312P.
XX PR 26-MAY-2000; 2000US-0207456P.
XX PR 30-JUN-2000; 2000US-00608408.
XX PR 03-AUG-2000; 2000US-00632366.
XX PR 21-SEP-2000; 2000US-0234687P.
XX PR 27-SEP-2000; 2000US-0236359P.

```

```

XX PR 04-OCT-2000; 2000GB-00024263.
XX PA (MOLE-) MOLECULAR DYNAMICS INC.
XX PI Penn SG, Hanzel DK, Chen W, Rank DR;
XX DR WPI; 2001-483446/52.
XX PT Single exon nucleic acid probes for analyzing gene expression in human
XX PT brains.
XX PS Example 4; SEQ ID NO 26807; 650pp + Sequence Listing; English.
XX CC The present invention provides a number of single exon nucleic acid
XX CC probes which are derived from genomic sequences expressed in the human
XX CC brain. They can be used to measure gene expression in brain cell samples,
XX CC which may enable the diagnosis and improved treatment of nervous system
XX CC diseases such as Alzheimer's disease, multiple sclerosis, schizophrenia,
XX CC epilepsy and cancers. The present sequence is a protein encoded by one of
XX CC the probes of the invention
XX SQ Sequence 56 AA;

Query Match 48.3%; Score 305; DB 4; Length 56;
Best Local Similarity 100.0%; Pred. No. 3e-28;
Matches 56; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

XX QY 49 FPEVPLNIGGAHFTTLRCYEDTMLAAMFSGRHYIPTDSEGRYFIDRDGTHF 104
XX DB 1 FPEVPLNIGGAHFTTLRCYEDTMLAAMFSGRHYIPTDSEGRYFIDRDGTHF 56

RESULT 12
ID ABG48768
AC ABG48768;
DT 25-FEB-2003 (first entry)
DE Human liver peptide, SEQ ID NO 27416.
XX KW Human; liver; cirrhosis; hyperlipoproteinaemia; hyperlipidaemia;
XX KW hypercholesterolaemia; coronary heart disease.
XX OS Homo sapiens.
XX PN WO200157273-A2.
XX PD 09-AUG-2001.
XX PF 30-JAN-2001; 2001WO-US000664.
XX PR 04-FEB-2000; 2000US-0180312P.
XX PR 26-MAY-2000; 2000US-0207456P.
XX PR 30-JUN-2000; 2000US-00608408.
XX PR 03-AUG-2000; 2000US-00632366.
XX PR 21-SEP-2000; 2000US-0234687P.
XX PR 27-SEP-2000; 2000US-0236359P.
XX PR 04-OCT-2000; 2000GB-00024263.
XX PA (MOLE-) MOLECULAR DYNAMICS INC.
XX PI Penn SG, Hanzel DK, Chen W, Rank DR;
XX DR WPI; 2001-488898/53.
XX PT Human genome-derived single exon nucleic acid probes useful for analyzing
XX PT gene expression in human adult liver.
XX PS Claim 27; SEQ ID NO 27416; 658pp; English.
XX CC The invention relates to a single exon nucleic acid probe (SENp) (I) for

```

ID ABB28752 standard; peptide; 56 AA.  
 AC ABB28752;  
 DT 01-FEB-2002 (first entry)  
 XX  
 XX Peptide #1403 encoded by breast cell single exon nucleic acid probe.  
 DE Human; microarray; single exon probe; gene expression; breast; disease;  
 XX cancer.  
 KW Homo sapiens.  
 XX  
 OS WO200157271-A2.  
 XX  
 PN 09-AUG-2001.  
 XX  
 PD 30-JAN-2001; 2001WO-US000662.  
 XX  
 PF 04-FEB-2000; 2000US-0180312P.  
 XX  
 PR 26-MAY-2000; 2000US-0207456P.  
 XX  
 PR 30-JUN-2000; 2000US-00608408.  
 XX  
 PR 03-AUG-2000; 2000US-00632366.  
 XX  
 PR 21-SEP-2000; 2000US-0234687P.  
 XX  
 PR 27-SEP-2000; 2000US-0236359P.  
 XX  
 PR 04-OCT-2000; 2000GB-00024263.  
 XX  
 PA (MOLE-) MOLECULAR DYNAMICS INC.  
 XX  
 PI Penn SG, Hanzel DK, Chen W, Rank DR;  
 XX  
 FI WPI; 2001-496933/54.  
 XX  
 DR New spatially-addressable set of single exon nucleic acid probes, useful  
 XX for measuring gene expression in sample derived from human breast,  
 XX PT comprises number of single exon nucleic acid probes.  
 XX  
 PS Claim 27; SEQ ID NO 11720; 327pp + Sequence Listing; English.  
 XX  
 CC The invention relates to a spatially-addressable set of single exon  
 XX nucleic acid probes for measuring gene expression in a sample derived  
 XX from human breast and Br 474 cells. The method involves contacting the  
 XX probes with a collection of detectably labelled nucleic acids derived  
 XX from mRNA of human breast, and then measuring the label bound to each  
 XX probe of the microarray. The probes are useful for verifying the  
 XX expression of regions of genomic DNA predicted to encode proteins. They  
 XX are useful for gene discovery, and for determining predisposition and/or  
 XX prognosing breast disease. Gene expression analysis is useful for  
 XX assessing the toxicity of chemical agents on cells. The microarray of  
 XX this invention presents a far greater diversity of probes for measuring  
 XX gene expression, with far less bias than expressed sequence tag  
 XX microarrays. The method is suitable for rapid production of functional  
 XX information from genomic sequence. The present sequence is a peptide  
 XX encoded by a single exon nucleic acid probe of the invention. Note: The  
 XX sequence data for this patent did not form part of the printed  
 XX specification, but was obtained in electronic format directly from WIPO  
 XX at ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 SQ Sequence 56 AA;  
 Query Match 48.3%; Score 305; DB 4; Length 56;  
 Best Local Similarity 100.0%; Pred. No. 3e-28;  
 Matches 56; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 49 FPEVPLNIGGAHPTTLRLCYEDTMLAAMFSGRHYIPTDSEGRYFIDRDGTHF 104  
 DB 1 FPEVPLNIGGAHPTTLRLCYEDTMLAAMFSGRHYIPTDSEGRYFIDRDGTHF 56  
 RESULT 9  
 ABB19375  
 ID ABB19375 standard; protein; 56 AA.  
 XX

AC ABB19375;  
 XX  
 DT 23-JAN-2002 (first entry)  
 XX  
 XX Protein #1374 encoded by probe for measuring heart cell gene expression.  
 DE Human; gene expression; heart; microarray; vascular system;  
 KW cardiovascular disease; hypertension; cardiac arrhythmia;  
 KW congenital heart disease.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200157274-A2.  
 XX  
 PD 09-AUG-2001.  
 XX  
 PF 30-JAN-2001; 2001WO-US000666.  
 XX  
 PR 04-FEB-2000; 2000US-0180312P.  
 XX  
 PR 26-MAY-2000; 2000US-0207456P.  
 XX  
 PR 30-JUN-2000; 2000US-00608408.  
 XX  
 PR 03-AUG-2000; 2000US-00632366.  
 XX  
 PR 21-SEP-2000; 2000US-0234687P.  
 XX  
 PR 27-SEP-2000; 2000US-0236359P.  
 XX  
 PR 04-OCT-2000; 2000GB-00024263.  
 XX  
 PA (MOLE-) MOLECULAR DYNAMICS INC.  
 XX  
 PI Penn SG, Hanzel DK, Chen W, Rank DR;  
 XX  
 FI WPI; 2001-488899/53.  
 XX  
 DR Single exon nucleic acid probes for analyzing gene expression in human  
 XX hearts.  
 XX  
 PS Claim 15; SEQ ID NO 21145; 530pp; English.  
 XX  
 CC The present invention relates to single exon nucleic acid probes for  
 XX measuring human gene expression in a sample derived from human heart (see  
 XX ABA21535-ABA41305). The present sequence is a protein encoded by one such  
 XX probe. The probes may be used for predicting, measuring and displaying  
 XX gene expression in samples derived from the human heart via microarrays.  
 XX By measuring gene expression, the probes are useful for predicting,  
 XX diagnosing, grading, staging, monitoring and prognosing diseases of the  
 XX human heart and vascular system e.g. cardiovascular disease,  
 XX hypertension, cardiac arrhythmias and congenital heart disease. Note: The  
 XX sequence data for this patent did not form part of the printed  
 XX specification, but was obtained in electronic format directly from WIPO  
 XX at ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 SQ Sequence 56 AA;  
 Query Match 48.3%; Score 305; DB 4; Length 56;  
 Best Local Similarity 100.0%; Pred. No. 3e-28;  
 Matches 56; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 49 FPEVPLNIGGAHPTTLRLCYEDTMLAAMFSGRHYIPTDSEGRYFIDRDGTHF 104  
 DB 1 FPEVPLNIGGAHPTTLRLCYEDTMLAAMFSGRHYIPTDSEGRYFIDRDGTHF 56  
 RESULT 10  
 AAM67102  
 ID AAM67102 standard; protein; 56 AA.  
 XX  
 XX AAM67102;  
 AC  
 XX 06-NOV-2001 (first entry)  
 DT  
 XX Human bone marrow expressed probe encoded protein SEQ ID NO: 27408.  
 DE Human; bone marrow expressed exon; gene expression analysis; probe;  
 KW microarray; cancer; leukaemia; lymphoma; myeloma.

PT Human genome-derived single exon nucleic acid probes useful for analyzing  
PT gene expression in human cervical epithelial cells.  
XX  
PS Claim 27; SEQ ID NO 19789; 487pp; English.

XX The present invention relates to human single exon nucleic acid probes  
CC (SENPs: see AA110068-AA128459). The present sequence is a peptide encoded  
CC by one such probe. The SENPs are derived from human Hela cells. The SENPs  
CC can be used to produce a single exon microarray, which can be used for  
CC measuring human gene expression in a sample derived from human cervical  
CC epithelial cells. By measuring gene expression, the probes are therefore  
CC useful in grading and/or staging of diseases of the cervix, notably  
CC cervical cancer. Note: The sequence data for this patent did not form  
CC part of the printed specification, but was obtained in electronic format  
CC directly from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 56 AA;

Query Match 48.3%; Score 305; DB 4; Length 56;  
Best Local Similarity 100.0%; Pred. No. 3e-28;  
Matches 56; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 49 PFEVPLNIGGAHFTTRLSYLCYEDTMAAMFSGRHYIPTDSEGRYFIDRDGTHF 104  
DB 1 PFEVPLNIGGAHFTTRLSYLCYEDTMAAMFSGRHYIPTDSEGRYFIDRDGTHF 56

RESULT 6  
ABB33939  
ID ABB33939 standard; peptide; 56 AA.

XX  
AC ABB33939;

XX 04-FEB-2002 (first entry)

DE Peptide #1445 encoded by human foetal liver single exon probe.

XX Human; foetal liver; gene expression; single exon nucleic acid probe.

XX Homo sapiens.

XX WO200157277-A2.

XX 09-AUG-2001.

XX 30-JAN-2001; 2001WO-US000669.

XX 04-FEB-2000; 2000US-0180312P.

XX 26-MAY-2000; 2000US-0207456P.

XX 30-JUN-2000; 2000US-00608408.

XX 03-AUG-2000; 2000US-00632366.

XX 21-SEP-2000; 2000US-0234687P.

XX 27-SEP-2000; 2000US-0236359P.

XX 04-OCT-2000; 2000GB-00024263.

XX (MOLE-) MOLECULAR DYNAMICS INC.

XX Penn SG, Hanzel DK, Chen W, Rank DR;

XX WPI; 2001-483447/52.

XX Human genome-derived single exon nucleic acid probes useful for analyzing  
XX gene expression in human fetal liver.

XX Claim 27; SEQ ID NO 26574; 639pp + Sequence Listing; English.

XX The invention relates to a single exon nucleic acid probe for measuring  
XX human gene expression in a sample derived from human foetal liver. The  
XX single exon nucleic acid probes may be used for predicting, measuring and  
XX displaying gene expression in samples derived from human fetal liver. The  
XX present sequence is a peptide encoded by a single exon nucleic acid probe  
XX of the invention. Note: The sequence data for this patent did not form  
XX part of the printed specification, but was obtained in electronic format

CC directly from WIPO at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 56 AA;

Query Match 48.3%; Score 305; DB 4; Length 56;  
Best Local Similarity 100.0%; Pred. No. 3e-28;  
Matches 56; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 49 PFEVPLNIGGAHFTTRLSYLCYEDTMAAMFSGRHYIPTDSEGRYFIDRDGTHF 104  
DB 1 PFEVPLNIGGAHFTTRLSYLCYEDTMAAMFSGRHYIPTDSEGRYFIDRDGTHF 56

RESULT 7

AAM27397

ID AAM27397 standard; protein; 56 AA.

XX  
AC AAM27397;

XX 17-OCT-2001 (first entry)

XX Peptide #1434 encoded by probe for measuring placental gene expression.

XX Probe; microarray; human; placenta; antenatal diagnosis;

XX Genetic disorder.

XX Homo sapiens.

XX WO200157272-A2.

XX 09-AUG-2001.

XX 30-JAN-2001; 2001WO-US000663.

XX 04-FEB-2000; 2000US-0180312P.

XX 26-MAY-2000; 2000US-0207456P.

XX 30-JUN-2000; 2000US-00608408.

XX 03-AUG-2000; 2000US-00632366.

XX 21-SEP-2000; 2000US-0234687P.

XX 27-SEP-2000; 2000US-0236359P.

XX 04-OCT-2000; 2000GB-00024263.

XX (MOLE-) MOLECULAR DYNAMICS INC.

XX Penn SG, Hanzel DK, Chen W, Rank DR;

XX WPI; 2001-488897/53.

XX Human genome-derived single exon nucleic acid probes useful for analyzing  
XX gene expression in human placenta.

XX Claim 27; SEQ ID NO 27666; 654pp; English.

XX The present invention relates to single exon nucleic acid probes (SENPs:  
XX see AA131315-AA157546). The present sequence is a peptide encoded by one  
XX such probe. The probes are useful for producing a microarray for  
XX predicting, measuring and displaying gene expression in samples derived  
XX from human placenta. The probes are useful for antenatal diagnosis of  
XX human genetic disorders

XX Sequence 56 AA;

Query Match 48.3%; Score 305; DB 4; Length 56;  
Best Local Similarity 100.0%; Pred. No. 3e-28;  
Matches 56; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 49 PFEVPLNIGGAHFTTRLSYLCYEDTMAAMFSGRHYIPTDSEGRYFIDRDGTHF 104  
DB 1 PFEVPLNIGGAHFTTRLSYLCYEDTMAAMFSGRHYIPTDSEGRYFIDRDGTHF 56

RESULT 8

ABB28752

PA (HELI-) HELIX RES INST.  
 XX (REAS-) RES ASSOC BIOTECHNOLOGY.  
 PI Isogai T, Sugiyama T, Otsuki T, Wakamatsu A, Sato H, Ishii S;  
 PI Yamamoto J, Isono Y, Hio Y, Otsuka K, Nagai K, Irie R, Tamechika I;  
 PI Seki N, Yoshikawa T, Otsuka M, Nagahari K, Masuho Y;  
 DR WPI; 2003-395539/38.  
 DR N-PSDB; ADA53477.  
 XX New polynucleotides encoding full-length polypeptides, e.g. secretory  
 PT and/or membrane proteins, useful for developing medicines for diseases in  
 PT which the gene is involved, or as target molecules for gene therapy.  
 XX  
 PS Claim 14; SEQ ID NO 2684; 205pp; English.  
 CC The present invention relates to novel human secretory or membrane  
 CC proteins (ADA54072-ADA54710) and their coding sequences (ADA52433-  
 CC ADA54071). The coding sequences are useful in the gene therapy of  
 CC diseases caused by abnormalities of the proteins, e.g. cancer,  
 CC inflammatory diseases, osteoporosis or neurological disease.  
 XX  
 SQ Sequence 289 AA;  
 Query Match 88.8%; Score 560.5; DB 6; Length 289;  
 Best Local Similarity 91.7%; Pred. No. 1.9e-57;  
 Matches 110; Conservative 3; Mismatches 2; Indels 5; Gaps 2;  
 QY 1 MVVVTGEPDSRRDGGAMSSDAEDDDFLEPATPTATQAGHALPLLPQEPPEVPLNIGGA 60  
 DB 1 MVVVTGEPDSRRDGGAMSSDAEDDDFLEPATPTATQAGHALPLLPQEPPEVPLNIGGA 60  
 QY 61 HFTFLSTLRCYEDTMLAMPFSGRHYIPTDSEGRYFIDRDGTHFGYVSPSTINFWVLGAD 120  
 DB 61 HFTFLSTLRCYEDTMLAMPFSGRHYIPTDSEGRYFIDRDGTHFGDV----LNF-LRSGD 115  
 RESULT 4  
 ABG70922  
 ID ABG70922 standard; protein; 106 AA.  
 XX AC ABG70922;  
 DT 10-DEC-2002 (first entry)  
 XX Human novel membrane protein #3.  
 DE Human; membrane protein; signal transduction; ion channel; cancer;  
 KW arthritis; antiviral; cytostatic; antiarthritic; nutritional; cosmetic.  
 XX Homo sapiens.  
 OS US2002119522-A1.  
 PN 29-AUG-2002.  
 XX 18-DEC-2001; 2001US-00024579.  
 XX 28-DEC-2000; 2000US-0258595P.  
 XX (FRID/) FRIDDLE C J.  
 PA (GERH/) GERHARDT B.  
 PA (HILB/) HILBUN E.  
 PA (TURN/) TURNER C A.  
 XX Friddle CJ, Gerhardt B, Hilbun E, Turner CA;  
 PI WPI; 2002-731353/79.  
 DR N-PSDB; ABS55071.  
 XX New human ion channel-related nucleic acid sequences useful for the  
 PT treatment of cancer, arthritis or as antiviral agents, in therapeutic,  
 PT diagnostic and pharmacogenomic applications.

XX Claim 3; Page 12-13; 20pp; English.  
 CC The invention relates to an isolated nucleic acid molecule encoding a  
 CC novel human membrane protein/ion channel-related protein, including a  
 CC vector sequence encoding the proteins. The nucleic acid and its encoded  
 CC amino acid sequences are useful in therapeutic, diagnostic and  
 CC pharmacogenomic applications. The nucleic acid sequences and the encoding  
 CC amino acid sequences are useful in microarrays or other assay formats, to  
 CC screen a collection of genetic material from patients that have  
 CC particular medical conditions, and to identify mutations associated with  
 CC a particular disease, and also in diagnostic or prognostic assays.  
 CC Nucleic acid sequences and the amino acid sequences are useful in  
 CC screening of drugs effective in the treatment of symptomatic or  
 CC phenotypic manifestation perturbing the normal function of a new human  
 CC protein (NHP) in the body. The nucleic acid and the amino acid sequences  
 CC are useful in diagnosis, drug screening, clinical trial monitoring, the  
 CC treatment of diseases and disorders and in cosmetic or nutritional  
 CC applications. NHPs are useful to treat a disease, or to therapeutically  
 CC augment the efficacy of chemotherapeutic agents useful in the treatment  
 CC of cancer, arthritis or as antiviral agents. The present sequence  
 CC represents a novel human membrane protein/ion channel-related protein  
 XX  
 SQ Sequence 106 AA;  
 Query Match 61.0%; Score 385; DB 5; Length 106;  
 Best Local Similarity 97.3%; Pred. No. 2.5e-37;  
 Matches 71; Conservative 2; Mismatches 0; Indels 0; Gaps 0;  
 QY 48 EFPEVPLNTGGAHFTTLSTLRCYEDTMLAMPFSGRHYIPTDSEGRYFIDRDGTHFGYV 107  
 DB 34 QFPEVPLNTGGAHFTTLSTLRCYEDTMLAMPFSGRHYIPTDSEGRYFIDRDGTHFGYV 93  
 QY 108 SPSTINFWVLGAD 120  
 DB 94 SPSTINFWVLGAD 106  
 RESULT 5  
 AAML4963  
 ID AAML4963 standard; protein; 56 AA.  
 XX AC AAML4963;  
 DT 12-OCT-2001 (first entry)  
 XX Peptide #1397 encoded by probe for measuring cervical gene expression.  
 DE Probe; human; microarray; gene expression; cervical epithelial cell;  
 KW cervical cancer.  
 XX Homo sapiens.  
 OS WO200157278-A2.  
 PN 09-AUG-2001.  
 XX 30-JAN-2001; 2001WO-US000670.  
 XX 04-FEB-2000; 2000US-0180312P.  
 PR 26-MAY-2000; 2000US-0207456P.  
 PR 30-JUN-2000; 2000US-00608408.  
 PR 03-AUG-2000; 2000US-00632366.  
 PR 21-SEP-2000; 2000US-0234587P.  
 PR 27-SEP-2000; 2000US-0236359P.  
 PR 04-OCT-2000; 2000GB-00024263.  
 XX (MOLE-) MOLECULAR DYNAMICS INC.  
 PA Penn SG, Hanzel DK, Chen W, Rank DR;  
 PI WPI; 2001-488901/53.  
 DR  
 XX



XX PS Claim 3; Page 12; 20pp; English.

XX CC The invention relates to an isolated nucleic acid molecule encoding a

CC novel human membrane protein/ion channel-related protein, including a

CC vector sequence encoding the proteins. The nucleic acid and its encoded

CC amino acid sequences are useful in therapeutic, diagnostic and

CC pharmacogenomic applications. The nucleic acid sequences and the encoding

CC amino acid sequences are useful in microarrays or other assay formats, to

CC screen a collection of genetic material from patients that have

CC particular medical conditions, and to identify mutations associated with

CC a particular disease, and also in diagnostic or prognostic assays.

CC Nucleic acid sequences and the amino acid sequences are useful in

CC screening of drugs effective in the treatment of symptomatic or

CC phenotypic manifestation perturbing the normal function of a new human

CC protein (NHP) in the body. The nucleic acid and the amino acid sequences

CC are useful in diagnosis, drug screening, clinical trial monitoring, the

CC treatment of diseases and disorders and in cosmetic or nutritional

CC applications. NHPs are useful to treat a disease, or to therapeutically

CC augment the efficacy of chemotherapeutic agents useful in the treatment

CC of cancer, arthritis or as antiviral agents. The present sequence

CC represents a novel human membrane protein/ion channel-related protein

XX CC Sequence 120 AA;

XX CC Query Match 100.0%; Score 631; DB 5; Length 120;

XX CC Best Local Similarity 100.0%; Pred. No. 2.7e-66;

XX CC Matches 120; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 M V V T G R P D S R R Q D G A M S S D A E D D F L E P A T P T A T Q A G H A L P L L P Q E P P V P L N I G G A 60

DB 1 M V V T G R P D S R R Q D G A M S S D A E D D F L E P A T P T A T Q A G H A L P L L P Q E P P V P L N I G G A 60

QY 61 H F T T L S T L R C Y E D T M L A A M F S G R H Y I P T D S E G R Y F I D R D G T H F G V S P S T I N F V L A G D 120

DB 61 H F T T L S T L R C Y E D T M L A A M F S G R H Y I P T D S E G R Y F I D R D G T H F G V S P S T I N F V L A G D 120

RESULT 2

AA015537

ID AAB15537 standard; protein; 271 AA.

XX AC AAB15537;

XX DT 28-FEB-2001 (first entry)

XX DE Human immune system molecule from Incyte clone 2751129.

XX KW Anti-inflammatory; keratolytic; anti-HIV; anti-allergic; antianaemic;

XX KW antiarteriosclerotic; antidiabetic; antidiabetic; nephrotropic; cancer;

XX KW antitumor; dermatological; antithyroid; virucide; hepatotropic; antibody;

XX KW immunosuppressive; cytostatic; fungicide; protozoacide; antibacterial;

XX KW gene therapy; diagnostic; immunological disorder; viral infection;

XX KW bacterial infection; fungal infection; parasitic infection; immunogen.

XX OS Homo sapiens.

XX WO2000060080-A2.

XX PD 12-OCT-2000.

XX PF 04-APR-2000; 2000WO-US0009072.

XX PR 05-APR-1999; 99US-0127852P.

XX PR 05-MAY-1999; 99US-0132647P.

XX PA (INCY-) INCYTE PHARM INC.

XX PI Yue H, Lal P, Tang YT, Baughn ME, Azimzai Y, Lu DAM;

XX DR WPI: 2000-665005/64.

XX DR N-PSDB; AAA95776.

PT New human immune system molecules 1-15 and polynucleotides encoding them

PT useful for diagnosing, treating or preventing e.g. immunological

PT disorders, infections, cell proliferative disorders, microbial

XX infections.

XX PS Claim 1; Page 77; 95pp; English.

XX CC This sequence represents a human immune system molecule (IMOL) encoded by

CC the cDNA isolated as clone 2751129 from the Incyte THP1A2S08 library. The

CC human IMOLs (AAB15536-B15550) and their encoding polynucleotides

CC (AAA95775-A95789), and compositions comprising them are useful for the

CC diagnosis, treatment or prevention of immunological disorders, infections

CC and cell proliferative disorders, including cancer. The IMOL may be used

CC to treat or prevent disorders associated with decreased expression or

CC activity of IMOL, such as immunological disorders (e.g. inflammation,

CC actinic keratosis, AIDS, Addison's disease), hematopoietic cancer,

CC infections caused by virus (e.g. adenovirus, parvovirus, coronavirus),

CC bacteria (e.g. Staphylococcus, Streptococcus, Shigella), fungi (e.g.

CC Aspergillus, Blastomyces), parasites (e.g. Plasmodium, Trypanosoma,

CC intestinal protozoa), cell proliferative disorders (e.g. actinic

CC keratosis, arteriosclerosis, bursitis), and cancers (e.g. leukemia,

CC melanoma, sarcoma). The peptides are also useful as immunogens for the

CC development of antibodies that specifically recognize these peptides.

CC The polynucleotides may be used to detect and quantify gene expression in

CC biopsied tissues in which expression of IMOL may be correlated with the

CC disease, as targets in a microarray, to detect differences in gene

CC sequences among normal, carrier and affected individuals, and for

CC screening libraries of compounds in drug screening techniques. Antibodies

CC which specifically bind to IMOL may be used for the diagnosis of

CC disorders characterized by expression of IMOL, or in assays to monitor

CC patients being treated with IMOL or agonists, antagonists, or inhibitors

XX CC of IMOL

XX CC Sequence 271 AA;

XX CC Query Match 88.8%; Score 560.5; DB 3; Length 271;

XX CC Best Local Similarity 91.7%; Pred. No. 1.7e-57;

XX CC Matches 110; Conservative 3; Mismatches 2; Indels 5; Gaps 2;

QY 1 M V V T G R P D S R R Q D G A M S S D A E D D F L E P A T P T A T Q A G H A L P L L P Q E P P V P L N I G G A 60

DB 1 M V V T G R P D S R R Q D G A M S S D A E D D F L E P A T P T A T Q A G H A L P L L P Q E P P V P L N I G G A 60

QY 61 H F T T L S T L R C Y E D T M L A A M F S G R H Y I P T D S E G R Y F I D R D G T H F G V S P S T I N F V L A G D 120

DB 61 H F T T L S T L R C Y E D T M L A A M F S G R H Y I P T D S E G R Y F I D R D G T H F G V S P S T I N F V L A G D 120

RESULT 3

ADA55116

ID ADA55116 standard; protein; 289 AA.

XX AC ADA55116;

XX DT 20-NOV-2003 (first entry)

XX DE Human protein, SEQ ID 2684.

XX KW Cytostatic; Anti-inflammatory; Osteopathic; Neuroprotective; Nootropic;

XX KW Gene Therapy; human; secretory protein; membrane proteins; cancer;

XX KW inflammatory disease; osteoporosis; neurological disease.

XX OS Homo sapiens.

XX EP1293569-A2.

XX PD 19-MAR-2003.

XX PF 21-MAR-2002; 2002EP-00006586.

XX PR 14-SEP-2001; 2001JP-00328381.

XX PR 24-JAN-2002; 2002US-0350435P.

GenCore version 5.1.6  
Copyright (c) 1993 - 2004 Compugen Ltd.

OM protein - protein search, using sw model

Run on: June 8, 2004, 09:37:55 ; Search time 96 seconds  
(without alignments)  
353.184 Million cell updates/sec

Title: US-10-024-579-5

Perfect score: 631

Sequence: 1 MVVVTGRRPDRRQDGAMSS.....GTHFGYVSPSTINFWLAGD 120

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1586107 seqs, 282547505 residues

Total number of hits satisfying chosen parameters: 1586107

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

A\_Geneseq\_29Jan04.\*

1: Geneseq1980s.\*

2: Geneseq1990s.\*

3: Geneseq2000s.\*

4: Geneseq2001s.\*

5: Geneseq2002s.\*

6: Geneseq2003as.\*

7: Geneseq2003bs.\*

8: Geneseq2004s.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	631	100.0	120	5	ABG70921 Human nov
2	560.5	88.8	271	3	ABJ15537 Human imm
3	560.5	88.8	289	6	ADA55116 Human pro
4	385	61.0	106	5	ABG70922 Human nov
5	305	48.3	56	4	AAM14963 Peptide #
6	305	48.3	56	4	ABB33939 Peptide #
7	305	48.3	56	4	AAM27397 Peptide #
8	305	48.3	56	4	ABB28752 Peptide #
9	305	48.3	56	4	ABB19375 Protein #
10	305	48.3	56	4	AAM67102 Human bon
11	305	48.3	56	4	AAM54702 Human bra
12	305	48.3	56	4	ABG48768 Human liv
13	305	48.3	56	4	AAM02689 Peptide #
14	305	48.3	56	5	ABG36762 Human pep
15	220.5	34.9	130	4	AAM25242 Human pro
16	215	34.1	76	3	AG03290 Human sec
17	163.5	25.9	455	7	ADC31345 Human nov
18	163.5	25.9	473	6	AAB32081 Human TRI
19	150.5	23.9	228	8	ABB60184 Drosophil
20	150.5	23.9	228	5	ABJ10887 K-beta M6
21	147	23.3	272	2	ABJ10887 Human pro
22	146	23.1	237	2	AAV34129 Human dot
23	146	23.1	237	4	AAW3682 Human pol
24	146	23.1	237	4	AAU27754 Human ful
25	146	23.1	237	4	AAW95201 Human pro

26	146	23.1	237	5	ABP53973	Abp53973 Human bet
27	146	23.1	237	5	ABJ10891	Abj10891 K-beta M6
28	146	23.1	237	5	ABJ10892	Abj10892 K-beta M6
29	146	23.1	237	5	ABP51811	Abp51811 Human pot
30	146	23.1	252	5	ABP51311	Abp51311 Human MDD
31	146	23.1	290	5	ABP69573	Abp69573 Human pol
32	146	23.1	339	4	AAE10329	AAe10329 Human tra
33	142	22.5	301	4	ABB65078	Abb65078 Drosophil
34	142	22.5	301	4	ABP53981	Abp53981 Drosophil
35	142	22.5	301	5	ABJ10904	Abj10904 K-beta M6
36	142	22.5	301	5	AAE28631	AAe28631 Drosophil
37	141	22.3	237	4	AAM93832	Aam93832 Human pol
38	140.5	22.3	150	5	ABG60220	Abg60220 Human DIT
39	140.5	22.3	225	6	ABU11829	Abu11829 Human MDD
40	140.5	22.3	329	4	AAM39908	Aam39908 Human pol
41	140.5	22.3	329	5	ABG72171	Abg72171 Human can
42	140.5	22.3	329	6	ABO14767	ABO14767 Novel hum
43	140.5	22.3	329	6	ABP58347	Abp58347 Human cel
44	139	22.0	289	3	AAG13411	Aag13411 Arabidops
45	139	22.0	298	3	AAG13410	Aag13410 Arabidops

## ALIGNMENTS

RESULT 1	
ABG70921	
ID	ABG70921 standard; protein; 120 AA.
XX	AC ABG70921;
XX	XX
DT	10-DEC-2002 (first entry)
XX	XX
DE	Human novel membrane protein #2.
XX	XX
KW	Human; membrane protein; signal transduction; ion channel; SNP; cancer;
KW	arthritis; antiviral; cytosolic; antithrombotic; nutritional; cosmetic;
KW	single nucleotide polymorphism.
XX	OS Homo sapiens.
XX	XX
PH	Key Location/Qualifiers
FT	Misc-difference 12
FT	/note= "May be Arg or Ser as a result of a single nucleotide polymorphism"
FT	Misc-difference 33
FT	/note= "May be Pro or leu as a result of a single nucleotide polymorphism"
FT	Misc-difference 78
FT	/note= "May be Ala or Ser as a result of a single nucleotide polymorphism"
US2002119522-A1.	
29-AUG-2002.	
18-DEC-2001; 2001US-00024579.	
28-DEC-2000; 2000US-0258595P.	
(FRID/) FRIDDLE C J.	
(GERH/) GERHARDT B.	
(HILB/) HILBUN B.	
(TURN/) TURNER C A.	
XX	XX
PI	Fridde CJ, Gerhardt B, Hilbun B, Turner CA;
XX	XX
DR	WPI; 2002-731353/79.
DR	N-PSDB; ABS55072.
XX	XX
PT	New human ion channel-related nucleic acid sequences useful for the treatment of cancer, arthritis or as antiviral agents, in therapeutic, diagnostic and pharmacogenomic applications.

DNA Sequencing by: M.B. Soares Lab  
 Clone distribution: MGC clone distribution information can be  
 found through the I.M.A.G.E. Consortium/LINL at:  
[www.bio.lnlni.gov/bbrr/image/image.html](http://www.bio.lnlni.gov/bbrr/image/image.html)  
 The following repetitive elements were found in this cDNA  
 sequence:  
 99-137, >GC rich#Low complexity

Seq primer: M13 Forward.

# FEATURES

Location/Qualifiers  
 1..406  
 /organism="Homo sapiens"  
 /mol\_type="mRNA"  
 /db\_xref="taxon:9606"  
 /clone="IMAGE:3067867"  
 /tissue\_type="lymph"  
 /cell\_type="germinal center B cells"  
 /cell\_line="MGC85"  
 /lab\_host="DH10B (UT1)"  
 /clone\_lib="NIH MGC 50"  
 /note="Vector: pVT3-Pac; Site\_1: NotI; Site\_2: Eco RI;  
 Constructed from size fractionated cytoplasmic mRNA  
 (3.5-4.4kb). Directionally cloned. Cells provided by  
 Louis M. Staudt, Ph.D. Library preparation by Maria de  
 Fatima Bonaldo, Ph.D. and M. Bento Soares, Ph.D."

# ORIGIN

Query Match 68.9%; Score 250; DB 13; Length 406;  
 Best Local Similarity 100.0%; Pred. No. 1.3e-45;  
 Matches 250; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGTGGTAGTCACGGGGGGGAGCCAGACACGGCTCGTCAGAGCGGTGCCATGTCACG 60  
 DB 157 ATGGTGGTAGTCACGGGGGGGAGCCAGACACGGCTCGTCAGAGCGGTGCCATGTCACG 216  
 QY 61 TCTGACGCCGGAAGACGACTTCTGAGCGCGGCCACGCCGACGCCGACGCCGACGCCGAC 120  
 DB 217 TCTGACGCCGGAAGACGACTTCTGAGCGCGGCCACGCCGACGCCGACGCCGACGCCG 276  
 QY 121 GCGTGGCCCTGCTGTCACAGAGTTTCTGAGGTGTTCCCTTAAACATCGAGGGGCT 180  
 DB 277 GCGTGGCCCTGCTGTCACAGAGTTTCTGAGGTGTTCCCTTAAACATCGAGGGGCT 336  
 QY 181 CACTTCACTACACGCTGTCCACATCGCGGTCTACAGAGACACCATGTTGGCAGCCATG 240  
 DB 337 CACTTCACTACACGCTGTCCACATCGCGGTCTACAGAGACACCATGTTGGCAGCCATG 396  
 QY 241 TTCAGTGGGC 250  
 DB 397 TTCAGTGGGC 406

# RESULT 15

CB546071 620 bp mRNA linear EST 01-APR-2003  
 LOCUS AMGNNUC:NRDGL-00092-D9-A nrdgl (10855); Rattus norvegicus cDNA clone  
 DEFINITION nrdgl-00092-d9 5', mRNA sequence.

ACCESSION CB546071

VERSION CB546071.1 GI:29430012

KEYWORDS EST.

SOURCE Rattus norvegicus (Norway rat)

# ORGANISM

Rattus norvegicus  
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;  
 Rattus.

REFERENCE 1 (bases 1 to 620)

Angen EST Program.

Angen Rat EST Program

Unpublished (2003)

# JOURNAL

COMMENT Contact: Dan Fitzpatrick

Amgen, Inc

One Angen Center Drive, Thousand Oaks, CA 91320-1799, USA

Tel: 805 447-4881

Plate: 00092 row: d column: 9.

# FEATURES

Location/Qualifiers  
 1..620  
 /organism="Rattus norvegicus"  
 /mol\_type="mRNA"  
 /db\_xref="taxon:10116"  
 /clone="nrdgl-00092-d9"  
 /tissue\_type="Dorsal Root Ganglia"  
 /clone\_lib="nrdgl (10855)"  
 /note="Vector: pSPORT1; Site\_1: SalI; Site\_2: NotI; rat  
 dorsal root ganglia"

# ORIGIN

Query Match 68.5%; Score 248.8; DB 14; Length 620;  
 Best Local Similarity 89.3%; Pred. No. 2.8e-45;  
 Matches 268; Conservative 0; Mismatches 32; Indels 0; Gaps 0;

QY 21 GGAGCCAGACAGCGCTCGTCAGGACGGTGCCATGTCAGAGCTCTCACGCCGAGACGACTT 80  
 DB 1 GGAGCCAGACAGCGCTCTACTCGGACGGTGCCATGTCAGCTCCGAGCGGAGACGACTT 60  
 QY 81 TCTGAGCCGCCACGCCGACGCCGACGCCGAGCGGGGCAOCGGCTGCCCCCTGCTGCGCAC 140  
 DB 61 CTTGAGCGCGCTACTCTCTACGGCCACGCCAAGCGGGGCAOCGGGCTGCCCTGCTGCCCA 120  
 QY 141 GGAGTTCTCGAGCTGTGTTCCCTTAAACATCGAGGGGCTCACCTTCACTACACGCCCTGTC 200  
 DB 121 GGAGTTCTCGAGCTGTGTTCCCTTAAACATCGAGGGGCTCACCTTCACTACACGCCCTGTC 180  
 QY 201 CACTCTGCGGTGCTACGAAGACACCATGTTTGGCAGCCATGTTTCTAGTGGGCGGCACTACAT 260  
 DB 181 TACTCTGCGGGCTATGAAGACACCATGTTGTCAGCCCATGTTTACGCGGCGGCATTACAT 240  
 QY 261 CCCCAAGACTCCGAGGCGGCTACTTCACTACGCGAGATGGCACACACTTTGGGTATGT 320  
 DB 241 CCCTACAGACTCGTAGGGTGGTACTTCACTACGCGAGATGGCACACACTTTGGAGATGT 300

Search completed: June 8, 2004, 10:12:38

Job time : 2530 secs

Query Match	71.8%;	Score	260.8;	DB	10;	Length	652;
Best Local Similarity	88.4%;	Pred. No.	6e-48;				
Matches	283;	Conservative	0;	Mismatches	37;	Indels	0;
Gaps	0;						

  

Qy	1	ATGTTGTTAGTCTACGGGCGGGAGCCAGACAGCCGCTGCTCAGACAGCGTGGCCATGTCACAGC	60
Db	160	ATGTTGTTAGTCTACGGGCGGGAGCCAGACAGCCGCTCACTCGACGCGTGGCCATGTCACAGC	219
Qy	61	TCGTACGCCCGAAGACGACTTCTCGAGCGCGCCACGGCGGACGGGCACGGCGGGGCAC	120
Db	220	TCGGAAGCCGAAGACGACTTCTCGAGCGCGGCCACTCTCAGGCCACGGCAGCGGGGCAC	279
Qy	121	GGCTGTGCCCTGTCTGCCACAGGAGTTCCTTGAGGCTTGTTCCTCCCTTAACATCGAGAGCGGCT	180
Db	280	GGGCTGCCCTGTCTGCCACAGGAGTTCCTTGAATGCTCCCTTGAACATTTGGAGGGGCT	339
Qy	181	CACTTCACTACACGCTGTCCACACTGGGGTGCTACGAAGACACCATGTTGGCGAGCCATG	240
Db	340	CACTTTACCACGGCTTGTCTACTCTCGGGCGCTATGAAGACACCATGTGCTGCTGCCATG	399
Qy	241	TTCAGTGGGCGGCACACTATCCCCACCGGACTCCGAGGGCGGGTACTTTCATCGACCGGAGAT	300
Db	400	TTCAGCGGGCGGCATTACATCCCTACAGACTCCAGGGCGCGGTACTTTCATCGATCGAGAT	459
Qy	301	GGCACACACTTTGGGTATGT	320
Db	460	GGCACACACTTTGGAGATGT	479

RESULT 13	
BB857275	
LOCUS	488 bp mRNA linear EST 26-NOV-2001
DEFINITION	BB857275 RIKEN full-length enriched, B16 F10Y cells Mus musculus cDNA clone G370042L12 5', mRNA sequence.
ACCESSION	BB857275
VERSION	BB857275.1 GI:17098729
KEYWORDS	EST.
SOURCE	Mus musculus (house mouse)

ORGANISM	Mus musculus
	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
REFERENCE	1 (bases 1 to 488)
AUTHORS	Akimura, T., Arakawa, T., Carninci, P., Furuno, M., Hanagaki, T., Hayatsu, N., Hiramoto, K., Hirooka, T., Hirozane, T., Imotani, K., Ishii, Y., Ito, M., Kawai, J., Kojima, Y., Konno, H., Konda, M., Matsuyama, T., Nakamura, M., Nishikawa, K., Nomura, K., Numasaki, R., Okazaki, Y., Okido, T., Saito, R., Sakai, C., Sakai, K., Sakazume, N., Sasaki, D., Sato, K., Shibata, K., Shinagawa, A., Shiraki, T., Sogabe, Y., Suzuki, H., Tagawa, A., Takahashi, F., Takaku-Akahira, S., Tanaka, T., Tomaru, A., Toyota, T., Watahiki, A., Yasunishi, A., Muramatsu, M. and Hayashizaki, Y.
TITLE	RIKEN Encyclopedia of Mouse Full-length cDNAs (Akimura, T., et al. 2001)

Unpublished (2001)  
Contact: Yoshihide Hayashizaki  
Laboratory for Genome Exploration Research Group, RIKEN Genomic  
Sciences Center (GSC), Yokohama Institute  
The Institute of Physical and Chemical Research (RIKEN)  
1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan  
Tel: 81-45-503-3222  
Fax: 81-45-503-9216  
Email: genome-resesgc.riken.go.jp,  
URL: <http://genome.gsc.riken.go.jp/>,  
Carninci, P., Shibata, Y., Hayatsu, N., Sugahara, Y., Shibata, K.,  
Itoh, M., Konno, H., Okazaki, Y., Muramatsu, M. and Hayashizaki, Y.  
Normalization and subtraction of cap-trapper-selected cDNAs to  
prepare full-length cDNA libraries for rapid discovery of new  
genes. *Genome Res.* 10 (10), 1617-1630 (2000)  
wagi, K., Fujiwaka, S., Inoue, K., Togawa, Y., Izawa, M., Ohara, E.,  
Watahiki, M., Yoneda, Y., Ishikawa, T., Ozawa, K., Tanaka, T.,  
Matsuura, S., Kawai, J., Okazaki, Y., Muramatsu, M., Inoue, Y., Kira, A.  
and Hayashizaki, Y.

RIKEN integrated sequence analysis (RISA) system-384-format sequencing pipeline with 384 multicapillary sequencer. *Genome Res.* 10 (11), 1757-1771 (2000)

Konno, H., Fukunishi, Y., Shibata, K., Itoh, M., Carninci, P., Sugahara, Y. and Hayashizaki, Y.

Computer-based methods for the mouse full-length cDNA encyclopedia: real-time sequence clustering for construction of a nonredundant cDNA library. *Genome Res.* 11 (2), 281-289 (2001)

Please visit our web site (<http://genome.gsc.riken.go.jp>) for further details.

```

FEATURES
source
1.498
Location/Qualifiers
/organism="Mus musculus"
/mol_type="cDNA"
/strain="C57BL/6J"
/db_xref="taxon:10090"
/clone="G370042L12"
/cell_type="B16 F10Y cells"
/clone_lib="RIKEN full-length enriched, B16 F10Y cells"

```

Query Match	71.4%	Score	259.2	DB	10	Length	488
Best Local Similarity	88.1%	Pred. No.	1.2e-47				
Matches	282	Conservative	0	Mismatches	38	Indels	0
Gaps	0						
Qy	1	ATGGTGGTGTACAGCGGGCGGAGCCAGACAGCGGTCTGCAGGACGGTGCCTATCTCCAGC	60				
Db	159	ATGGTGGTGTATCACCGGGCGGAGCCAGACAGCGGTCTGCAGGACGGTGCCTATCTCCAGC	218				
Qy	61	TTCTGAGCCGGAAGACACTTTTCTGTGAGCCGGCCACGCGACGGCCACGCGAGGGGGGCAC	120				
Db	219	TCCGAGCCGGAAGACACTTTCTGTGAGCCGGCCACCTCTACGGCCACGCAAGCGGGGCAC	278				
Qy	121	GGCTGCGCCCTGCTGCCACAGGAGTTTCTGTGAGTTGTCTCCCTTTAATCATCGGAGGGGCT	180				
Db	279	GGGCTGCGCCCTGCTGCCCGGAGGAGTTTCTGTGAAGTGTCTCCCTTGAACTGAGGGGCT	338				
Qy	181	CAGTTCACATACAGCGCTGTCCACACTCGGTGCTACGAGACACCACTGTTGGCAGCGCCATG	240				
Db	339	CACTTTACACCGGCTGTGCTACTCTGCGCGGCTATGAAGACACCACTGTGGCTGGCCATG	398				
Qy	241	TTTCAGTGGGCGGCACTACATCCCCACGGACTCCGAGGGCGGCTACTTTCATTCGACCCGAGAT	300				
Db	399	TTTCAGCGGGCGGCACTTACATCCCTACAGACTCCGAGGGCGGCTACTTTCATTCGATCGAGAT	458				
Qy	301	GGCACAACACTTTGGGTATGT	320				
Db	459	GGGACAACACTTTGGAGATGT	478				

RESULT 14	BU431372	406 bp	linear	EST 09-SEP-2002
LOCUS	UI-HF-BN0-sfs-e-10-0-UI.r1	NIH MGC_50	Homo sapiens	cDNA clone
DEFINITION	IMAGE:3067867	5', mRNA sequence.		
ACCESSION	BU431372			
VERSION	BU431372.1	GI:22769859		
KEYWORDS	EST.			
SOURCE	Homo sapiens (human)			
ORGANISM	Homo sapiens			

REFERENCE	mammalia; eutheria; primates; catarrhini; hominidae; homo. 1 (bases 1 to 406)
AUTHORS	NIH-MGC <a href="http://mgc.nci.nih.gov/">http://mgc.nci.nih.gov/</a> .
TITLE	National Institutes of Health, Mammalian Gene Collection (MGC)
JOURNAL	Unpublished (1999)
COMMENT	Contact: Robert Strausberg, Ph.D. Email: <a href="mailto:cgabs-remail.nih.gov">cgabs-remail.nih.gov</a> Eco RI site shown at the beginning of the sequence. Tissue procurement: Louis M. Staudt, M.D., Ph.D. cDNA Library Preparation: M.B. Soares Lab cDNA Library Arrived by: M.B. Soares Lab

## FEATURES

Location/Qualifiers  
 1..925  
 /organism="Homo sapiens"  
 /mol\_type="mRNA"  
 /db\_xref="taxon:9606"  
 /clone\_lib="NIH MGC 71"  
 /tissue\_type="leiomyosarcoma"  
 /lab\_host="DH10B (phage-resistant)"  
 /note="Organ: uterus; Vector: pCMV-SPORT6; Site 1: NotI; Site 2: SalI; Cloned unidirectionally. Primer: Oligo dT. Average insert size 2.1 Kb."

## ORIGIN

Query Match 84.8%; Score 307.8; DB 13; Length 925;  
 Best Local Similarity 99.4%; Pred. No. 2.2e-58;  
 Matches 309; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 10 GTACGGGGGGGAGCAGACAGCGCTGTCAGGAGCGTGCCATGTCAGCTCTACGCC 69  
 DB 1 GTACGGGGGGGAGCAGACAGCGCTGTCAGGAGCGTGCCATGTCAGCTCTACGCC 60

QY 70 GAAGACGACTTCTGAGCGCGGCCAGCGAGCGGCCACCGAGCGGGGACGCGCTGCC 129  
 DB 61 GAAGACGACTTCTGAGCGCGGCCAGCGAGCGGCCACCGAGCGGGGACGCGCTGCC 120

QY 130 CTGCTGCCACGAGAGTTCTGAGGTTGTCGAGTTGTCCTTAAATCGAGGGGCTCACTTCACT 189  
 DB 121 CTGCTGCCACGAGAGTTCTGAGGTTGTCGAGTTGTCCTTAAATCGAGGGGCTCACTTCACT 180

QY 190 ACAAGCGCTGTCCACACTGCGGTGCTACGAGAGACACCATGTCGAGCCATGTCAGTGG 249  
 DB 181 ACAAGCGCTGTCCACACTGCGGTGCTACGAGAGACACCATGTCGAGCCATGTCAGTGG 240

QY 250 CGGCATACATCCCAACGAGCTCCGAGGCGCGGTACTTCAATCGACGAGATGGCAACAC 309  
 DB 241 CGGCATACATCCCAACGAGCTCCGAGGCGCGGTACTTCAATCGACGAGATGGCAACAC 300

QY 310 TTTGGTATGT 320  
 DB 301 TTTGGAGATGT 311

## RESULT 2

BI827921 978 bp mRNA linear EST 04-OCT-2001  
 LOCUS 603073846P1 NTH\_MGC\_119 Homo sapiens cDNA clone IMAGE:5165722 5',  
 DEFINITION mRNA sequence.

ACCESSION BI827921

VERSION BI827921.1 GI:15939471

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM

REFERENCE 1 (bases 1 to 978)

AUTHORS NIH-MGC <http://mgc.nci.nih.gov/>.

TITLE National Institutes of Health, Mammalian Gene Collection (MGC)

JOURNAL Unpublished (1999)

COMMENT Contact: Robert Strausberg, Ph.D.

Email: [cgapsb@mail.nih.gov](mailto:cgapsb@mail.nih.gov)

Tissue Procurement: Life Technologies, Inc.

cDNA Library Preparation: Life Technologies, Inc.

cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC clone distribution information can be

found through the I.M.A.G.E. Consortium/LLNL at:

<http://image.llnl.gov>

Plate: LLAM1411 row: 1 column: 11

High quality sequence stop: 730.

Location/Qualifiers

1..978

/organism="Homo sapiens"

## FEATURES

## source

/mol\_type="mRNA"  
 /db\_xref="taxon:9606"  
 /clone\_lib="NIH MGC 119"  
 /tissue\_type="medulla"  
 /lab\_host="DH10B"  
 /note="Organ: brain; Vector: pCMV-SPORT6; Site 1: NotI; Site 2: EcoRV (destroyed); RNA source normal medulla from anonymous male age 27. Library is oligo-dT primed and directionally cloned (EcoRV site is destroyed upon cloning). Average insert size 1.3 kb, insert size range 0.9-3 kb. Library is normalized and enriched for full-length clones and was constructed by C. Gruber (Invitrogen). Research Genetics tracking code 013. Note: this is a NIH\_MGC Library."

## ORIGIN

Query Match 81.2%; Score 294.8; DB 12; Length 978;  
 Best Local Similarity 98.8%; Pred. No. 1.8e-55;  
 Matches 318; Conservative 0; Mismatches 2; Indels 2; Gaps 2;

QY 1 ATGTGTGTAGTCACGGGGGGAGCCAGACAGCGTGTGAGGACGGTGCCATGTCAGC 60  
 DB 125 ATGTGTGTAGTCACGGGGGGAGCCAGACAGCGTGTGAGGACGGTGCCATGTCAGC 184

QY 61 TCTGAGCGCGGAGGAGGACTTCTGAGCGCGGCCAGCGCGGCCACCGAGCGGGGCGAC 120  
 DB 185 TCTGAGCGCGGAGGAGGACTTCTGAGCGCGGCCAGCGCGGCCACCGAGCGGGGCGAC 244

QY 121 GCGTGTCCCTGTGCTGCCACAGGAGTTTCTGAGGTTGTTCCCTTAAATCATCGAGGGGCT 180  
 DB 245 GCGTGTCCCTGTGCTGCCACAGGAGTTTCTGAGGTTGTTCCCTTAAATCATCGAGGGGCT 304

QY 191 CACTTCACTACAGCGCTGTCCACACTGCG-GGTGTACGAGACACCATGTTGGAGGCCAT 239  
 DB 305 CACTTCACTACAGCGCTGTCCACACTGCGTGTGTGTACGAGACACCATGTTGGAGGCCAT 364

QY 240 GTTCAAGTGGGCGGCACTACATCCCGAGGCTCCGAGGCGCGGTACTTTCATCGACC-GAG 298  
 DB 365 GTTCAAGTGGGCGGCACTACATCCCGAGGCTCCGAGGCGCGGTACTTTCATCGACC-GAG 424

QY 299 ATGGCACACACTTTGGGTATGT 320  
 DB 425 ATGGCACACACTTTGGGATGT 446

## RESULT 3

CF162776

LOCUS

DEFINITION

ACCESSION

VERSION

KEYWORDS

SOURCE

ORGANISM

REFERENCE

AUTHORS

TITLE

JOURNAL

MEDLINE

PUBMED

COMMENT

CF162776 569 bp mRNA linear EST 25-JUL-2003  
 B0716E09-5 NIA Mouse Embryonic Germ Cell cDNA Library (Long) Mus  
 musculus cDNA clone NIA:B0716E09 IMAGE:30459416 5', mRNA sequence.

CF162776

EST.

Mus musculus (house mouse)

Mus musculus

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

1 (bases 1 to 569)

Piao, Y., Ko, N.T., Lim, M.K. and Ko, M.S.H.

Construction of long-transcript enriched cDNA libraries from

submicrogram amounts of total RNAs by a universal PCR amplification

method

Genome Res. 11 (9), 1553-1558 (2001)

21429098

1154199

Contact: Dawood B. Dudekula

Laboratory of Genetics

National Institute on Aging/National Institutes of Health

333 Cassell Drive, Suite 4000, Baltimore, MD 21224-6820, USA

Email: [cdna@lgsun.grc.nih.gov](mailto:cdna@lgsun.grc.nih.gov)

Plate: B0716 row: E column: 09

Seq primer: M13 Reverse

GenCore version 5.1.6  
Copyright (c) 1993 - 2004 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: June 8, 2004, 09:16:07 ; Search time 2522 Seconds

(without alignments)  
4298.165 Million cell updates/sec

Title: US-10-024-579-4

Perfect score: 363

Sequence: 1 atgggtgtagtcaaggcg.....tagctagcaggtagtag 363

Scoring table: IDENTITY\_NUC

Gapop 10.0 , Gapext 1.0

Searched: 27513289 seqs, 14931090276 residues

Total number of hits satisfying chosen parameters: 55026578

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

EST:\*

1: em\_estba:\*

2: em\_esthum:\*

3: em\_estin:\*

4: em\_estmu:\*

5: em\_estov:\*

6: em\_estpl:\*

7: em\_estro:\*

8: em\_hct:\*

9: gb\_estl:\*

10: gb\_est2:\*

11: gb\_hct:\*

12: gb\_est3:\*

13: gb\_est4:\*

14: gb\_est5:\*

15: em\_estfun:\*

16: em\_estom:\*

17: em\_gss\_hum:\*

18: em\_gss\_inv:\*

19: em\_gss\_pln:\*

20: em\_gss\_vrt:\*

21: em\_gss\_fun:\*

22: em\_gss\_mam:\*

23: em\_gss\_mus:\*

24: em\_gss\_pro:\*

25: em\_gss\_rod:\*

26: em\_gss\_pig:\*

27: em\_gss\_vrl:\*

28: gb\_gssl:\*

29: gb\_gss2:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	307.8	84.8	925	BU902852	BU902852 AGENCOURT
2	294.8	81.2	978	BU927921	BU927921 603073846
3	262.4	72.3	569	CF162776	CF162776 B0716E09-
4	262.4	72.3	617	BY722445	BY722445 BY722445

5	262.4	72.3	651	10	BB626649
6	262.4	72.3	655	10	BB655300
7	262.4	72.3	658	10	BB616333
8	262.4	72.3	658	10	BB658221
9	262.4	72.3	3269	11	AK029942
10	262.4	72.3	3485	11	AK034583
11	262.4	72.3	4269	11	AK083583
12	260.8	71.8	652	10	BB626934
13	259.2	71.4	488	10	BB857275
14	250	68.9	406	13	BU431372
15	248.8	68.5	620	14	CB546071
16	238.8	65.2	696	10	BB646865
17	232	63.9	697	13	BU702844
18	221.8	61.1	416	9	AI674184
19	203.2	56.0	718	13	BU388953
20	203.2	56.0	763	13	BU392850
21	198.8	54.8	771	9	AJ447425
22	187.2	51.6	394	13	BY132675
23	179.2	49.4	879	13	BU184896
24	177	48.8	473	13	BY153097
25	137	37.7	225	10	BE244090
26	124.4	34.3	498	10	BB854860
27	121	33.3	607	10	BB856997
28	120	33.1	470	10	BB857546
29	118.8	32.7	733	13	BU143952
30	114.6	31.6	922	29	CNS02F32
31	111.8	30.8	904	14	CK017002
32	105	28.9	762	13	BU211328
33	105	28.9	779	14	CA347612
34	105	28.9	827	13	EX882754
35	96.6	26.6	297	10	BB601700
36	94.8	26.1	316	13	BY152426
37	93.2	25.7	661	13	EX871982
38	91.8	25.3	645	29	AY420591
39	87.4	24.1	645	29	AY420592
40	80.6	22.2	645	29	AY420593
41	70	19.3	600	14	CA383840
42	68.4	18.8	578	13	EX085304
43	68.2	18.8	877	29	CNS03UBE
44	67	18.5	461	10	AW645752
45	67	18.5	476	10	AW635487

## ALIGNMENTS

RESULT 1  
BU902852  
LOCUS  
DEFINITION AGENCOURT\_10180053 NIH\_MGC\_71 Homo sapiens CDNA clone IMAGE:6528253  
5' mRNA sequence.  
ACCESSION BU902852  
VERSION BU902852.1 GI:24084765  
KEYWORDS EST.  
SOURCE Homo sapiens (human)  
ORGANISM  
REFERENCE 1 (bases 1 to 925)  
AUTHORS NIH-MGC <http://mgc.nci.nih.gov/>  
TITLE National Institutes of Health, Mammalian Gene Collection (MGC)  
JOURNAL Unpublished (1999)  
COMMENT Contact: Robert Strausberg, Ph.D.  
Email: [cgapbs-remail.nih.gov](mailto:cgapbs-remail.nih.gov)  
Tissue Procurement: ATCC  
CDNA Library Preparation: Life Technologies, Inc.  
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)  
DNA Sequencing by: Agencourt Bioscience Corporation  
Clone Distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:  
<http://image.llnl.gov>  
Plate: LLAM14126 row: h column: 13  
High quality sequence stop: 638.

BU902852 925 bp cDNA linear EST 17-OCT-2002  
AGENCOURT\_10180053 NIH\_MGC\_71 Homo sapiens CDNA clone IMAGE:6528253  
5' mRNA sequence.

Db 406 GCGCTGCCCTCTCTGCAAGAGGTTCTGAGGTGTTCCCTTAAACATGAGGGGCT 465  
Qy 181 CACTTCTACACGGCTGTCCACACTGCGGTCTACAGACACCATGTGTCACGCCATG 240  
Db 466 CACTTCTACACGGCTGTCCACACTGCGGTCTACAGACACCATGTGTCACGCCATG 525  
Qy 241 TTCAGTGGGGCGCATCTACATCCCAAGCACTCCGAGGCGCGTACTTCTATCGACCGAGAT 300  
Db 526 TTCAGTGGGGCGCATCTACATCCCAAGCACTCCGAGGCGCGTACTTCTATCGACCGAGAT 585  
Qy 301 GGCACACACTTTGGGTATCT 320  
Db 586 GGCACACACTTTGGGATGCT 605

RESULT 7  
US-09-864-761-1385/c  
; Sequence 1385, Application US/09864761  
; Patent No. US20020048763A1  
; GENERAL INFORMATION:  
; APPLICANT: Penn, Sharon G.  
; APPLICANT: Rank, David R.  
; APPLICANT: Hanzel, David K.  
; APPLICANT: Chen, Wensheng  
; TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR  
; TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY  
; FILE REFERENCE: Aetionics-X-1  
; CURRENT APPLICATION NUMBER: US/09/864,761  
; CURRENT FILING DATE: 2001-05-23  
; PRIOR APPLICATION NUMBER: US 60/180,312  
; PRIOR FILING DATE: 2000-02-04  
; PRIOR APPLICATION NUMBER: US 60/207,456  
; PRIOR FILING DATE: 2000-05-26  
; PRIOR APPLICATION NUMBER: US 09/632,366  
; PRIOR FILING DATE: 2000-08-03  
; PRIOR APPLICATION NUMBER: GB 24263.5  
; PRIOR FILING DATE: 2000-10-04  
; PRIOR APPLICATION NUMBER: US 60/236,359  
; PRIOR FILING DATE: 2000-09-27  
; PRIOR APPLICATION NUMBER: PCT/US01/00666  
; PRIOR FILING DATE: 2001-01-30  
; PRIOR APPLICATION NUMBER: PCT/US01/00667  
; PRIOR FILING DATE: 2001-01-30  
; PRIOR APPLICATION NUMBER: PCT/US01/00664  
; PRIOR FILING DATE: 2001-01-30  
; PRIOR APPLICATION NUMBER: PCT/US01/00669  
; PRIOR FILING DATE: 2001-01-30  
; PRIOR APPLICATION NUMBER: PCT/US01/00665  
; PRIOR FILING DATE: 2001-01-30  
; PRIOR APPLICATION NUMBER: PCT/US01/00668  
; PRIOR FILING DATE: 2001-01-30  
; PRIOR APPLICATION NUMBER: PCT/US01/00663  
; PRIOR FILING DATE: 2001-01-30  
; PRIOR APPLICATION NUMBER: PCT/US01/00662  
; PRIOR FILING DATE: 2001-01-30  
; PRIOR APPLICATION NUMBER: PCT/US01/00661  
; PRIOR FILING DATE: 2001-01-30  
; PRIOR APPLICATION NUMBER: PCT/US01/00670  
; PRIOR FILING DATE: 2001-01-30  
; PRIOR APPLICATION NUMBER: US 60/234,687  
; PRIOR FILING DATE: 2000-09-21  
; PRIOR APPLICATION NUMBER: US 09/608,408  
; PRIOR FILING DATE: 2000-06-30  
; PRIOR APPLICATION NUMBER: US 09/774,203  
; PRIOR FILING DATE: 2001-01-29  
; NUMBER OF SEQ ID NOS: 49117  
; SOFTWARE: Anomax Sequence Listing Engine vers. 1.1  
; SEQ ID NO 1385  
; LENGTH: 473  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
; FEATURE:

; OTHER INFORMATION: MAP TO AC006001.2  
; OTHER INFORMATION: EXPRESSED IN PLACENTA, SIGNAL = 4.6  
; OTHER INFORMATION: EXPRESSED IN HELA, SIGNAL = 12  
; OTHER INFORMATION: EXPRESSED IN HEART, SIGNAL = 5.4  
; OTHER INFORMATION: EXPRESSED IN BONE MARROW, SIGNAL = 4.8  
; OTHER INFORMATION: EXPRESSED IN BRAIN, SIGNAL = 7.3  
; OTHER INFORMATION: EXPRESSED IN BT474, SIGNAL = 14  
; OTHER INFORMATION: EXPRESSED IN HBL100, SIGNAL = 8.5  
; OTHER INFORMATION: EXPRESSED IN LUNG, SIGNAL = 5.5  
; OTHER INFORMATION: EXPRESSED IN ADULT LIVER, SIGNAL = 2.4  
; OTHER INFORMATION: EXPRESSED IN FETAL LIVER, SIGNAL = 6.4  
; US-09-864-761-1385

Query Match 61.1%; Score 221.8; DB 9; Length 473;  
Best Local Similarity 86.8%; Pred. No. 7.7e-62;  
Matches 244; Conservative 0; Mismatches 37; Indels 0; Gaps 0;  
Qy 83 TGGAGCGGGCCACGCGGACGCGCCACGCGAGGGGGGCGCGCTGCCCTGCTGCCACAGG 142  
Db 461 TGGAGCAGCGCCAGCTCTCATTTCCCGTTGCTGCTGAGAGCCCTGGTGATTTCTTTCC 402  
Qy 143 AGTTTCTGAGGTGTTCCCTTAAACATCGAGGGGCTCACTTCACTACAGCCCTGTCCA 202  
Db 401 AGTTTCTGAGGTGTTCCCTTAAACATCGAGGGGCTCACTTCACTACAGCCCTGTCCA 342  
Qy 203 CACTGCGGTCTACGAAGACACCATGTGTCAGCCATGTCAGTGGGGCGGCATCATGCC 262  
Db 341 CACTGCGGTCTACGAAGACACCATGTGTCAGCCATGTCAGTGGGGCGGCATCATGCC 282  
Qy 263 CCAGGACTCGAGGCGCGGTACTTCATCGACCGAGATGGCACACACTTTGGGTATGCT 322  
Db 281 CCAGGACTCGAGGCGCGGTACTTCATCGACCGAGATGGCACACACTTTGGGTATGCT 222  
Qy 323 CTCCTCTTACAATCAACTTTGTAGTCTCTAGCAGGTGATTAG 363  
Db 221 CTCCTCTTACAATCAACTTTGTAGTCTCTAGCAGGTGATTAG 181

RESULT 8  
US-10-086-156-29  
; Sequence 29, Application US/10086156  
; Publication No. US20030054989A1  
; GENERAL INFORMATION:  
; APPLICANT: Bristol-Myers Squibb Company  
; TITLE OF INVENTION: POLYNUCLEOTIDE ENCODING TWO NOVEL HUMAN POTASSIUM CHANNEL BETA-SU  
; FILE REFERENCE: D0115NP  
; CURRENT APPLICATION NUMBER: US/10/086,156  
; PRIOR FILING DATE: 2002-02-28  
; PRIOR APPLICATION NUMBER: US 60/272,190  
; PRIOR FILING DATE: 2001-02-28  
; PRIOR APPLICATION NUMBER: US 60/274,258  
; PRIOR FILING DATE: 2001-03-07  
; NUMBER OF SEQ ID NOS: 98  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 29  
; LENGTH: 583  
; TYPE: DNA  
; ORGANISM: homo sapiens  
; US-10-086-156-29

Query Match 61.1%; Score 221.8; DB 15; Length 583;  
Best Local Similarity 86.8%; Pred. No. 8.1e-62;  
Matches 244; Conservative 0; Mismatches 37; Indels 0; Gaps 0;  
Qy 83 TGGAGCGGGCCACGCGGACGCGCCACGCGAGGGGGGCGCGCTGCCCTGCTGCCACAGG 142  
Db 145 TGGAGCAGCGCCAGCTCTCATTTCCCGTTGCTGCTGAGAGCCCTGGTGATTTCTTTCC 204  
Qy 143 AGTTTCTGAGGTGTTCCCTTAAACATCGAGGGGCTCACTTCACTACAGCCCTGTCCA 202  
Db 205 AGTTTCTGAGGTGTTCCCTTAAACATCGAGGGGCTCACTTCACTACAGCCCTGTCCA 264

; SOFTWARE: pt\_Fl\_genes Version 2.0  
; SEQ ID NO 408  
; LENGTH: 1068  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
; FEATURE:  
; NAME/KEY: CDS  
; LOCATION: (100)..(1068)  
-US-10-988-408

Query Match 87.3%; Score 316.8; DB 16; Length 1068;  
Best Local Similarity 99.4%; Pred. No. 1.3e-92;  
Matches 318; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1 ATGGTGGTAGTCACGGGGCGGGAGCCAGACAGCGGTCTCAGACGGTGCATGCCAGC 60  
DB 100 ATGGTGGTAGTCACGGGGCGGGAGCCAGACAGCGGTCTCAGACGGTGCATGCCAGC 159  
QY 61 TCTGAGCGCCGAGAGACGACTTTCTGGAGCGCGGCCACCGCCGACGCGCGGGGGCAC 120  
DB 160 TCTGAGCGCCGAGAGACGACTTTCTGGAGCGCGGCCACCGCCGACGCGCGGGGGCAC 219  
QY 121 GCCTGCGCCCTGCTGCCACAGGAGTTTCTGAGGTGTTCCCTTAACTCGAGGGGCT 180  
DB 220 GCCTGCGCCCTGCTGCCACAGGAGTTTCTGAGGTGTTCCCTTAACTCGAGGGGCT 279  
QY 181 CACTTCACTACAGCGCTGTCCACACTCGCGGTCTACGAGACACCACTGTTGGCAGCCATG 240  
DB 280 CACTTCACTACAGCGCTGTCCACACTCGCGGTCTACGAGACACCACTGTTGGCAGCCATG 339  
QY 241 TTCAGTGGGGCGGCACTACATCCCAACGCACTCCGAGGGCGGGTACTTTCATCGACCGAGAT 300  
DB 340 TTCAGTGGGGCGGCACTACATCCCAACGCACTCCGAGGGCGGGTACTTTCATCGACCGAGAT 399  
QY 301 GGCACACACTTTGGGTATGT 320  
DB 400 GGCACACACTTTGGAGATGT 419

## RESULT 5

US-10-094-749-1045  
; Sequence 1045, Application US/10094749  
; Publication No. US20030219741A1  
; GENERAL INFORMATION:  
; APPLICANT: ISOGAI, TAKAO  
; APPLICANT: SUGIYAMA, TOMOYASU  
; APPLICANT: OTSUKI, TETSUJI  
; APPLICANT: WAKAMATSU, AI  
; APPLICANT: SATO, HIROYUKI  
; APPLICANT: ISHII, SHIZUKO  
; APPLICANT: YAMAMOTO, JUN-ICHI  
; APPLICANT: ISONO, YUUKO  
; APPLICANT: HIO, YURI  
; APPLICANT: OTSUKA, KAORU  
; APPLICANT: NAGAI, KEIICHI  
; APPLICANT: IRIE, RYOTARO  
; APPLICANT: TAMECHIKA, ICHIRO  
; APPLICANT: SEKI, NAOHICO  
; APPLICANT: OTSUKA, MOTOKYU  
; APPLICANT: NAGAHARI, KENJI  
; APPLICANT: MASUHO, YASUHIKO  
; TITLE OF INVENTION: NOVEL FULL-LENGTH cDNA  
; FILE REFERENCE: 084335/0160  
; CURRENT APPLICATION NUMBER: US/10/094,749  
; PRIOR FILING DATE: 2002-03-12  
; PRIOR APPLICATION NUMBER: 60/350,435  
; PRIOR FILING DATE: 2002-01-24  
; PRIOR APPLICATION NUMBER: JP 2001-328381  
; PRIOR FILING DATE: 2001-09-14  
; NUMBER OF SEQ ID NOS: 3381  
; SOFTWARE: Patent In Ver. 2.1  
; SEQ ID NO 1045

; LENGTH: 2576  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
; US-10-094-749-1045

Query Match 87.3%; Score 316.8; DB 16; Length 2576;  
Best Local Similarity 99.4%; Pred. No. 1.6e-92;  
Matches 318; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 ATGGTGGTAGTCACGGGGCGGGAGCCAGACAGCGGTCTCAGACGGTGCATGCCAGC 60  
DB 108 ATGGTGGTAGTCACGGGGCGGGAGCCAGACAGCGGTCTCAGACGGTGCATGCCAGC 167  
QY 61 TCTGAGCGCCGAGAGACGACTTTCTGGAGCGCGGCCACCGCCGACGCGCGGGGGCAC 120  
DB 168 TCTGAGCGCCGAGAGACGACTTTCTGGAGCGCGGCCACCGCCGACGCGCGGGGGCAC 227  
QY 121 GCCTGCGCCCTGCTGCCACAGGAGTTTCTGAGGTGTTCCCTTAACTCGAGGGGCT 180  
DB 228 GCCTGCGCCCTGCTGCCACAGGAGTTTCTGAGGTGTTCCCTTAACTCGAGGGGCT 287  
QY 181 CACTTCACTACAGCGCTGTCCACACTCGCGGTCTACGAGACACCACTGTTGGCAGCCATG 240  
DB 288 CACTTCACTACAGCGCTGTCCACACTCGCGGTCTACGAGACACCACTGTTGGCAGCCATG 347  
QY 241 TTCAGTGGGGCGGCACTACATCCCAACGCACTCCGAGGGCGGGTACTTTCATCGACCGAGAT 300  
DB 348 TTCAGTGGGGCGGCACTACATCCCAACGCACTCCGAGGGCGGGTACTTTCATCGACCGAGAT 407  
QY 301 GGCACACACTTTGGGTATGT 320  
DB 408 GGCACACACTTTGGAGATGT 427

## RESULT 6

US-10-086-156-23  
; Sequence 23, Application US/10086156  
; Publication No. US20030054989A1  
; GENERAL INFORMATION:  
; APPLICANT: Bristol-Myers Squibb Company  
; TITLE OF INVENTION: POLYNUCLEOTIDE ENCODING TWO NOVEL HUMAN POTASSIUM CHANNEL BETA-SU  
; FILE REFERENCE: D0115NP  
; CURRENT APPLICATION NUMBER: US/10/086,156  
; CURRENT FILING DATE: 2002-02-28  
; PRIOR APPLICATION NUMBER: US 60/272,190  
; PRIOR FILING DATE: 2001-02-28  
; PRIOR APPLICATION NUMBER: US 60/274,258  
; PRIOR FILING DATE: 2001-03-07  
; NUMBER OF SEQ ID NOS: 98  
; SOFTWARE: Patent In version 3.0  
; SEQ ID NO 23  
; LENGTH: 2154  
; TYPE: DNA  
; ORGANISM: homo sapiens  
; FEATURE:  
; NAME/KEY: CDS  
; LOCATION: (1)..(1029)  
US-10-086-156-23

Query Match 86.8%; Score 315.2; DB 15; Length 2154;  
Best Local Similarity 99.1%; Pred. No. 5e-92;  
Matches 317; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1 ATGGTGGTAGTCACGGGGCGGGAGCCAGACAGCGGTCTCAGACGGTGCATGCCAGC 60  
DB 286 ATGGTGGTAGTCACGGGGCGGGAGCCAGACAGCGGTCTCAGACGGTGCATGCCAGC 345  
QY 61 TCTGAGCGCCGAGAGACGACTTTCTGGAGCGCGGCCACCGCCGACGCGCGGGGGCAC 120  
DB 346 TCTGAGCGCCGAGAGACGACTTTCTGGAGCGCGGCCACCGCCGACGCGCGGGGGCAC 405  
QY 121 GCCTGCGCCCTGCTGCCACAGGAGTTTCTGAGGTGTTCCCTTAACTCGAGGGGCT 180



Db 121 GGGTGGCCCTGCTGCGCAGGAGTTTCTCAGGTTTCTCCCTTAACATCGAGGGCT 180  
QY 181 CACTTCACTACAGCGCTGTCACACTCGCGTGTACGAACACACCACTTTGGCAGCCATG 240  
Db 181 CACTTCACTACAGCGCTGTCACACTCGCGTGTACGAACACACCACTTTGGCAGCCATG 240  
QY 241 TTCAGTGGGGCGGCACTACATCCCAAGCACTCCAGGCGCGGTACTTTCATCGACCGAGAT 300  
Db 241 TTCAGTGGGGCGGCACTACATCCCAAGCACTCCAGGCGCGGTACTTTCATCGACCGAGAT 300  
QY 301 GGCACACACTTTGGGTATGTCCTCCCTCTACAATCAACTTTGTAGTCTAGCAGGTGAT 360  
Db 301 GGCACACACTTTGGGTATGTCCTCCCTCTACAATCAACTTTGTAGTCTAGCAGGTGAT 360  
QY 361 TAG 363  
Db 361 TAG 363

RESULT 2  
US-10-024-579-8  
; Sequence 8, Application US/10024579  
; Publication No. US20020119522A1  
; GENERAL INFORMATION:  
; APPLICANT: Fiddle, Carl Johan  
; APPLICANT: Gerhardt, Brenda  
; APPLICANT: Hilbun, Erin  
; APPLICANT: Turner, C. Alexander Jr.  
; TITLE OF INVENTION: No. US20020119522A1 Human Ion Channel-Related Proteins  
; TITLE OF INVENTION: and Polynucleotides Encoding the Same  
; FILE REFERENCE: LEX-0274-USA  
; CURRENT APPLICATION NUMBER: US/10/024,579  
; CURRENT FILING DATE: 2001-12-18  
; PRIOR APPLICATION NUMBER: US 60/258,595  
; PRIOR FILING DATE: 2000-12-28  
; NUMBER OF SEQ ID NOS: 17  
; SOFTWARE: Fast-Seq for Windows Version 4.0  
; SEQ ID NO 8  
; LENGTH: 680  
; TYPE: DNA  
; ORGANISM: homo sapiens  
US-10-024-579-8

Query Match 100.0%; Score 363; DB 14; Length 680;  
Best Local Similarity 100.0%; Pred. No. 1.2e-107;  
Matches 363; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGTGTAGTCAAGCGGGCGGAGCCAGACAGCGGTGCTCAGACCGGTGCTCCAGC 60  
Db 198 ATGGTGTAGTCAAGCGGGCGGAGCCAGACAGCGGTGCTCAGACCGGTGCTCCAGC 257  
QY 61 TCTGACGCGCAAGACGACTTTCTGGAGCGGCGCCAGCGCGCCAGCGCGGGGCGAC 120  
Db 258 TCTGACGCGCAAGACGACTTTCTGGAGCGGCGCCAGCGCGCCAGCGCGGGGCGAC 317  
QY 121 GCCTGCCCCCTGCTGCGCACAGGAGTTTCTCAGGTTGTTCCCTTTAACTGCGAGGGCT 180  
Db 318 GCCTGCCCCCTGCTGCGCACAGGAGTTTCTCAGGTTGTTCCCTTTAACTGCGAGGGCT 377  
QY 181 CACTTCACTACAGCGCTGTCACACTCGGTGTCTAGAGACACCACTTTGGCAGCCATG 240  
Db 378 CACTTCACTACAGCGCTGTCACACTCGGTGTCTAGAGACACCACTTTGGCAGCCATG 437  
QY 241 TTCAGTGGGGCGGCACTACATCCCAAGCACTCCAGGCGCGGTACTTTCATCGACCGAGAT 300  
Db 438 TTCAGTGGGGCGGCACTACATCCCAAGCACTCCAGGCGCGGTACTTTCATCGACCGAGAT 497  
QY 301 GGCACACACTTTGGGTATGTCCTCCCTCTACAATCAACTTTGTAGTCTAGCAGGTGAT 360  
Db 498 GGCACACACTTTGGGTATGTCCTCCCTCTACAATCAACTTTGTAGTCTAGCAGGTGAT 557  
QY 361 TAG 363

Db 558 TAG 560  
RESULT 3  
US-10-296-115-18  
; Sequence 18, Application US/10296115  
; Publication No. US20040053248A1  
; GENERAL INFORMATION:  
; APPLICANT: Hyseq Inc  
; TITLE OF INVENTION: No. US20040053248A1 Nucleic Acids and Polypeptides  
; FILE REFERENCE: 784PCT  
; CURRENT APPLICATION NUMBER: US/10/296,115  
; CURRENT FILING DATE: 2002-11-18  
; PRIOR APPLICATION NUMBER: US09/488,725  
; PRIOR FILING DATE: 2000-01-21  
; PRIOR APPLICATION NUMBER: US09/552,317  
; PRIOR FILING DATE: 2000-04-25  
; NUMBER OF SEQ ID NOS: 1478  
; SEQ ID NO 18  
; LENGTH: 519  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
US-10-296-115-18

Query Match 87.3%; Score 316.8; DB 13; Length 519;  
Best Local Similarity 99.4%; Pred. No. 1.1e-92;  
Matches 318; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 ATGGTGTAGTCAAGCGGGCGGAGCCAGACAGCGGTGCTCAGACCGGTGCTCCAGC 60  
Db 69 ATGGTGTAGTCAAGCGGGCGGAGCCAGACAGCGGTGCTCAGACCGGTGCTCCAGC 128  
QY 61 TCTGACGCGCAAGACGACTTTCTGGAGCGGCGCCAGCGCGCCAGCGCGGGGCGAC 120  
Db 129 TCTGACGCGCAAGACGACTTTCTGGAGCGGCGCCAGCGCGCCAGCGCGGGGCGAC 188  
QY 121 GCCTGCCCCCTGCTGCGCACAGGAGTTTCTCAGGTTGTTCCCTTTAACTGCGAGGGCT 180  
Db 189 GCCTGCCCCCTGCTGCGCACAGGAGTTTCTCAGGTTGTTCCCTTTAACTGCGAGGGCT 248  
QY 181 CACTTCACTACAGCGCTGTCACACTCGGTGTCTAGAGACACCACTTTGGCAGCCATG 240  
Db 249 CACTTCACTACAGCGCTGTCACACTCGGTGTCTAGAGACACCACTTTGGCAGCCATG 308  
QY 241 TTCAGTGGGGCGGCACTACATCCCAAGCACTCCAGGCGCGGTACTTTCATCGACCGAGAT 300  
Db 309 TTCAGTGGGGCGGCACTACATCCCAAGCACTCCAGGCGCGGTACTTTCATCGACCGAGAT 368  
QY 301 GGCACACACTTTGGGTATGTTGT 320  
Db 369 GGCACACACTTTGGGTATGTTGT 388

RESULT 4  
US-10-120-988-408  
; Sequence 408, Application US/10120988  
; Publication No. US20030219745A1  
; GENERAL INFORMATION:  
; APPLICANT: Tang, Y. Tom  
; APPLICANT: Goodrich, Ryle  
; APPLICANT: Liu, Chenghua  
; APPLICANT: Ren, Felyan  
; APPLICANT: Wang, Dunrui  
; APPLICANT: Drmanac, Radoje T.  
; TITLE OF INVENTION: No. US20030219745A1 Nucleic Acids and  
; FILE REFERENCE: 802CON  
; CURRENT APPLICATION NUMBER: US/10/120,988  
; CURRENT FILING DATE: 2002-04-11  
; PRIOR APPLICATION NUMBER: 09/774,528  
; PRIOR FILING DATE: 2001-01-30  
; NUMBER OF SEQ ID NOS: 441

GenCore version 5.1.6  
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: June 8, 2004, 09:30:35 ; Search time 348 Seconds  
(without alignments)  
4758.634 Million cell updates/sec

Title: US-10-024-579-4

Perfect score: 363

Sequence: 1 atgttgtagtaccggggcg.....tagctctagcaggtgattag 363

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 2995936 seqs, 2280998010 residues

Total number of hits satisfying chosen parameters: 5991872

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications NA:

- 1: /cgm2\_6/ptodata/2/pubpna/US07\_PUBCOMB.seq\*
- 2: /cgm2\_6/ptodata/2/pubpna/PCT\_NEW\_PUB.seq\*
- 3: /cgm2\_6/ptodata/2/pubpna/US06\_NEW\_PUB.seq\*
- 4: /cgm2\_6/ptodata/2/pubpna/US06\_PUBCOMB.seq\*
- 5: /cgm2\_6/ptodata/2/pubpna/US07\_NEW\_PUB.seq\*
- 6: /cgm2\_6/ptodata/2/pubpna/PCTUS\_PUBCOMB.seq\*
- 7: /cgm2\_6/ptodata/2/pubpna/US08\_NEW\_PUB.seq\*
- 8: /cgm2\_6/ptodata/2/pubpna/US08\_PUBCOMB.seq\*
- 9: /cgm2\_6/ptodata/2/pubpna/US09\_PUBCOMB.seq\*
- 10: /cgm2\_6/ptodata/2/pubpna/US09\_PUBCOMB.seq\*
- 11: /cgm2\_6/ptodata/2/pubpna/US09C\_PUBCOMB.seq\*
- 12: /cgm2\_6/ptodata/2/pubpna/US09\_NEW\_PUB.seq\*
- 13: /cgm2\_6/ptodata/2/pubpna/US09A\_PUBCOMB.seq\*
- 14: /cgm2\_6/ptodata/2/pubpna/US10A\_PUBCOMB.seq\*
- 15: /cgm2\_6/ptodata/2/pubpna/US10B\_PUBCOMB.seq\*
- 16: /cgm2\_6/ptodata/2/pubpna/US10C\_PUBCOMB.seq\*
- 17: /cgm2\_6/ptodata/2/pubpna/US10\_NEW\_PUB.seq\*
- 18: /cgm2\_6/ptodata/2/pubpna/US60\_NEW\_PUB.seq\*
- 19: /cgm2\_6/ptodata/2/pubpna/US60\_PUBCOMB.seq\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	363	100.0	363	14	US-10-024-579-4
2	363	100.0	680	14	US-10-024-579-8
3	316.8	87.3	519	13	US-10-296-115-18
4	316.8	87.3	1068	16	US-10-120-988-408
5	316.8	87.3	2576	16	US-10-094-749-1045
6	315.2	86.8	2154	15	US-10-086-156-23
7	221.8	61.1	473	9	US-09-864-761-1385
8	221.8	61.1	583	15	US-10-086-156-29
9	220.2	60.7	321	14	US-10-024-579-6
10	172	47.4	173	9	US-09-864-761-18144
11	80	22.0	80	15	US-10-086-156-30
12	66.2	18.2	785	9	US-09-910-943-331
13	61.8	17.0	484	10	US-09-918-995-12592
14	61.8	17.0	692	10	US-09-764-891-9849

15	61.8	17.0	692	10	US-09-764-891-9850	Sequence 9850, Ap
16	61.8	17.0	692	10	US-09-764-891-9851	Sequence 9851, Ap
17	61.8	17.0	724	15	US-10-086-156-8	Sequence 8, Appli
18	61.8	17.0	779	15	US-10-029-386-22606	Sequence 22606, A
19	61.8	17.0	1014	13	US-10-296-115-653	Sequence 653, App
20	61.8	17.0	1109	13	US-10-302-172-672	Sequence 672, App
21	61.8	17.0	1839	15	US-10-086-156-1	Sequence 1, Appli
22	61.8	17.0	3101	15	US-10-198-846-12187	Sequence 12187, A
23	57.2	15.8	1718	15	US-10-168-651-31	Sequence 31, Appli
24	57	15.7	531	15	US-10-106-698-398	Sequence 398, App
25	57	15.7	592	9	US-09-925-299-106	Sequence 106, App
26	57	15.7	592	10	US-09-925-299-106	Sequence 106, App
27	57	15.7	1696	15	US-10-040-805-1	Sequence 1, Appli
28	57	15.7	1696	15	US-10-264-171-1	Sequence 1, Appli
29	57	15.7	1710	15	US-10-101-510-376	Sequence 376, App
30	56.4	15.5	420	15	US-10-101-510-182	Sequence 182, App
31	50.6	13.9	388	15	US-10-101-510-607	Sequence 607, App
32	50.6	13.9	2677	16	US-10-094-749-625	Sequence 625, App
33	50	13.8	3512	9	US-09-969-347-190	Sequence 190, App
34	49.2	13.6	728	13	US-10-276-774-1285	Sequence 1285, Ap
35	49.2	13.6	2940	16	US-10-094-749-1206	Sequence 1206, Ap
36	48.4	13.3	1542	15	US-10-121-746-24	Sequence 24, Appli
37	48.4	13.3	1751	15	US-10-121-746-23	Sequence 23, Appli
38	48.4	13.3	1800	15	US-10-121-746-21	Sequence 21, Appli
39	48.4	13.3	1836	15	US-10-121-746-22	Sequence 22, Appli
40	42.6	11.7	471	13	US-10-085-783A-42075	Sequence 42075, A
41	42.6	11.7	471	16	US-10-242-535A-42075	Sequence 42075, A
42	42.6	11.7	1450	15	US-10-037-270-1058	Sequence 1058, Ap
43	42.6	11.7	1450	16	US-10-117-722-1058	Sequence 1058, Ap
44	42.6	11.7	1862	15	US-10-121-746-11	Sequence 11, Appli
45	41	11.3	435	9	US-09-983-965-1948	Sequence 1948, Ap

#### ALIGNMENTS

##### RESULT 1

US-10-024-579-4  
; Sequence 4, Application US/10024579  
; Publication No. US20020119522A1  
; GENERAL INFORMATION:  
; APPLICANT: Friddle, Carl Johan  
; APPLICANT: Gerhardt, Brenda  
; APPLICANT: Hilbun, Erin  
; APPLICANT: Turner, C. Alexander Jr.  
; TITLE OF INVENTION: No. US20020119522A1el Human Ion Channel-Related Proteins  
; TITLE OF INVENTION: and Polynucleotides Encoding the Same  
; FILE REFERENCE: LEX-0274-USA  
; CURRENT APPLICATION NUMBER: US/10/024,579  
; CURRENT FILING DATE: 2001-12-18  
; PRIOR APPLICATION NUMBER: US 60/258,595  
; PRIOR FILING DATE: 2000-12-28  
; NUMBER OF SEQ ID NOS: 17  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 4  
; LENGTH: 363  
; TYPE: DNA  
; ORGANISM: homo sapiens  
US-10-024-579-4

Query Match 100.0%; Score 363; DB 14; Length 363;  
Best Local Similarity 100.0%; Pred. No. 1.le-107;  
Matches 363; Conservative 0; Mismatches 0; Gaps 0;  
Qy 1 ATGTGTTAGTACGGGGGGGAGCCAGACAGCGCTGTCTAGACGGTGCATGTCAGC 60  
1 ATGTGTTAGTACGGGGGGGAGCCAGACAGCGCTGTCTAGACGGTGCATGTCAGC 60  
Db 1 ATGTGTTAGTACGGGGGGGAGCCAGACAGCGCTGTCTAGACGGTGCATGTCAGC 60  
Qy 61 TCTGACGCCGAGACGACTTTCTTGGACCGCGCCAGCGCCAGCGCGCGGGGCGAC 120  
61 TCTGACGCCGAGACGACTTTCTTGGACCGCGCCAGCGCCAGCGCGGGGCGAC 120  
Qy 121 GCGCTGCCCTGCTGCCACAGGAGTTCTTCTGAGTTGTTCCCTTAACATCGGAGGGCT 180

=> s novel human proteins or NHPS  
L1 586 NOVEL HUMAN PROTEINS OR NHPS

=> s l1 and (ion channel#)  
L2 60 L1 AND (ION CHANNEL#)

=> duplicate remove  
ENTER L# LIST OR (END):l2  
DUPLICATE PREFERENCE IS 'USPATFULL, PCTFULL'  
KEEP DUPLICATES FROM MORE THAN ONE FILE? Y/(N):n  
PROCESSING COMPLETED FOR L2  
L3 60 DUPLICATE REMOVE L2 (0 DUPLICATES REMOVED)

=> d 1-60

L3 ANSWER 1 OF 60 USPATFULL on STN  
AN 2004:63821 USPATFULL  
TI Human proteins having transmembrane domains and cDNAs encoding these proteins  
IN Kato, Seishi, Sagamihara-shi, JAPAN  
Sekine, Shingo, Ageo-shi, JAPAN  
PA Sagami Chemical Research Center, Sagamihara-shi, JAPAN (non-U.S. corporation)  
Protegene, Inc., Tokyo, JAPAN (non-U.S. corporation)  
PI US 2004048339 A1 20040311  
AI US 2003-616942 A1 20030711 (10)  
RLI Continuation of Ser. No. US 2000-529100, filed on 21 Aug 2000, ABANDONED  
A 371 of International Ser. No. WO 1998-JP4474, filed on 5 Oct 1998,  
UNKNOWN  
PRAI JP 1997-276269 19971008  
DT Utility  
FS APPLICATION  
LN.CNT 2285  
INCL INCLM: 435/069.100  
INCLS: 435/320.100; 435/325.000; 530/350.000; 536/023.500  
NCL NCLM: 435/069.100  
NCLS: 435/320.100; 435/325.000; 530/350.000; 536/023.500  
IC [7]  
ICM: C07K014-705  
ICS: C07H021-04; C12P021-02; C12N005-06  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 2 OF 60 USPATFULL on STN  
AN 2004:45198 USPATFULL  
TI Human proteins having hydropobic domains and dnas encoding these proteins  
IN Kato, Seishi, Sagamihara-shi, JAPAN  
Kimura, Tomoko, Tsuchiura-shi, JAPAN  
PI US 2004034192 A1 20040219  
AI US 2002-169395 A1 20021129 (10)  
WO 2000-JP9359 20001228  
PRAI JP 2000-585 20000106  
JP 2000-588 20000106  
JP 2000-2299 20000111  
JP 2000-26862 20000203  
JP 2000-58367 20000303  
DT Utility  
FS APPLICATION  
LN.CNT 11212  
INCL INCLM: 530/350.000  
INCLS: 536/023.500; 435/320.100; 435/325.000; 435/069.100; 530/388.100  
NCL NCLM: 530/350.000  
NCLS: 536/023.500; 435/320.100; 435/325.000; 435/069.100; 530/388.100  
IC [7]

ICM: C07K014-435  
ICS: C07K016-18; C12P021-02; C12N005-06; C07H021-04  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 3 OF 60 USPATFULL on STN  
AN 2004:32039 USPATFULL  
TI **Novel human proteins**, polynucleotides  
encoding them and methods of using the same  
IN Gangolli, Esha A., Madison, CT, UNITED STATES  
Spytek, Kimberly A., New Haven, CT, UNITED STATES  
Gilbert, Jennifer, Madison, CT, UNITED STATES  
Casman, Stacie, North Haven, CT, UNITED STATES  
Blalock, Angela, Branford, CT, UNITED STATES  
Li, Li, Branford, CT, UNITED STATES  
Vernet, Corine, Branford, CT, UNITED STATES  
Shenoy, Suresh, Branford, CT, UNITED STATES  
Mishra, Vishnu S., Gainesville, FL, UNITED STATES  
Furtak, Katarzyna, Ansonia, CT, UNITED STATES  
Gerlach, Valerie L., Branford, CT, UNITED STATES  
Edinger, Shlomit, New Haven, CT, UNITED STATES  
Malyanker, Uriel, Branford, CT, UNITED STATES  
Stone, David, Guilford, CT, UNITED STATES  
Millet, Isabelle, Milford, CT, UNITED STATES  
Smithson, Glennda, Guilford, CT, UNITED STATES  
Gunther, Erik, Branford, CT, UNITED STATES  
Ellerman, Karen, Branford, CT, UNITED STATES  
Padigar, Muralidhara, Branford, CT, UNITED STATES  
Taupier, Raymond J., JR., East Haven, CT, UNITED STATES  
Anderson, David W., Branford, CT, UNITED STATES  
PI US 2004024181 A1 20040205  
AI US 2001-55569 A1 20011026 (10)  
PRAI US 2000-243642P 20001026 (60)  
US 2000-243320P 20001026 (60)  
US 2000-243592P 20001026 (60)  
US 2000-243681P 20001027 (60)  
US 2000-243863P 20001027 (60)  
US 2000-244443P 20001031 (60)  
US 2000-245029P 20001101 (60)  
US 2000-244995P 20001101 (60)  
US 2000-245293P 20001102 (60)  
US 2000-245315P 20001102 (60)  
US 2000-245316P 20001102 (60)  
US 2001-262994P 20010119 (60)  
US 2001-269056P 20010215 (60)  
US 2001-272923P 20010302 (60)  
US 2001-276565P 20010315 (60)  
US 2001-318119P 20010907 (60)  
DT Utility  
FS APPLICATION  
LN.CNT 10785  
INCL INCLM: 530/350.000  
INCLS: 536/023.500; 435/069.100; 435/320.100; 435/325.000  
NCL NCLM: 530/350.000  
NCLS: 536/023.500; 435/069.100; 435/320.100; 435/325.000  
IC [7]  
ICM: C07K014-705  
ICS: C12P021-02; C12N005-06; C07H021-04  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 4 OF 60 USPATFULL on STN  
AN 2003:334945 USPATFULL  
TI **Novel Human proteins**, polynucleotides  
encoding them and methods of using the same  
IN Zerhusen, Bryan D., Branford, CT, UNITED STATES

Kekuda, Ramesh, Norwalk, CT, UNITED STATES  
 Spytek, Kimberly A., New Haven, CT, UNITED STATES  
 Shenoy, Suresh G., Branford, CT, UNITED STATES  
 Miller, Charles E., Guilford, CT, UNITED STATES  
 Hjalt, Tord, Lomma, SWEDEN  
 Gerlach, Valerie, Branford, CT, UNITED STATES  
 Baumgartner, Jason C., New Haven, CT, UNITED STATES  
 Guo, Xiaojia (Sasha), Branford, CT, UNITED STATES  
 Gangolli, Esha A., Madison, CT, UNITED STATES  
 Vernet, Corine A. M., Branford, CT, UNITED STATES  
 Padigar, Muralidhara, Branford, CT, UNITED STATES  
 Li, Li, Branford, CT, UNITED STATES  
 Pena, Carol E. A., New Haven, CT, UNITED STATES  
 Gorman, Linda, Branford, CT, UNITED STATES  
 Anderson, David W., Branford, CT, UNITED STATES  
 Edinger, Schlomit R., New Haven, CT, UNITED STATES  
 Patturajan, Meera, Branford, CT, UNITED STATES  
 Stone, David J., Guilford, CT, UNITED STATES

PI US 2003235821 A1 20031225  
 AI US 2002-161927 A1 20020603 (10)  
 PRAI US 2001-295661P 20010604 (60)  
 US 2001-295607P 20010604 (60)  
 US 2001-296404P 20010606 (60)  
 US 2001-296418P 20010606 (60)  
 US 2001-296575P 20010607 (60)  
 US 2001-297414P 20010611 (60)  
 US 2001-297567P 20010612 (60)  
 US 2001-298528P 20010615 (60)  
 US 2001-325685P 20010927 (60)  
 US 2001-299133P 20010618 (60)  
 US 2001-299230P 20010619 (60)  
 US 2001-299949P 20010621 (60)  
 US 2001-300177P 20010622 (60)  
 US 2001-318727P 20010912 (60)  
 US 2001-300883P 20010626 (60)  
 US 2002-358814P 20020222 (60)  
 US 2001-301530P 20010628 (60)  
 US 2001-301550P 20010628 (60)  
 US 2001-302951P 20010703 (60)  
 DT Utility  
 FS APPLICATION  
 LN.CNT 17643  
 INCL INCLM: 435/006.000  
 INCLS: 435/007.200; 435/069.100; 435/325.000; 435/252.300; 435/254.200;  
 435/320.100; 536/023.200; 435/183.000; 530/350.000; 435/348.000  
 NCL NCLM: 435/006.000  
 NCLS: 435/007.200; 435/069.100; 435/325.000; 435/252.300; 435/254.200;  
 435/320.100; 536/023.200; 435/183.000; 530/350.000; 435/348.000  
 IC [7]  
 ICM: C12Q001-68  
 ICS: G01N033-53; G01N033-567; C07H021-04; C12N009-00; C12P021-02;  
 C12N001-21; C07K014-47; C12N015-74; C12N001-18; C12N005-06  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 5 OF 60 USPATFULL on STN  
 AN 2003:324327 USPATFULL  
 TI **Novel human proteins**, polynucleotides  
 encoding them and methods of using the same  
 IN Li, Li, Branford, CT, UNITED STATES  
 Furtak, Katarzyna, Ansonia, CT, UNITED STATES  
 Perna, Amanda, Hamden, CT, UNITED STATES  
 Patturajan, Meera, Branford, CT, UNITED STATES  
 Shimkets, Richard A., Guilford, CT, UNITED STATES  
 Guo, Xiaojia Sasha, Branford, CT, UNITED STATES

Casman, Stacie J., North Haven, CT, UNITED STATES  
 Burgess, Catherine E., Wethersfield, CT, UNITED STATES  
 Malyankar, Uriel M., Branford, CT, UNITED STATES  
 Tchernev, Velizar T., Branford, CT, UNITED STATES  
 Vernet, Corine A., Branford, CT, UNITED STATES  
 Spytek, Kimberly A., New Haven, CT, UNITED STATES  
 Agee, Michele, Wallingford, CT, UNITED STATES  
 Rastelli, Luca, Guilford, CT, UNITED STATES  
 Shenoy, Suresh G., Branford, CT, UNITED STATES  
 Grosse, William M., Branford, CT, UNITED STATES  
 Alsobrook, John P., II, Madison, CT, UNITED STATES  
 Lepley, Denise M., Branford, CT, UNITED STATES  
 Gerlach, Valerie, Branford, CT, UNITED STATES  
 Edinger, Schlomit R., New Haven, CT, UNITED STATES  
 MacDougall, John R., Hamden, CT, UNITED STATES  
 Peyman, John A., New Haven, CT, UNITED STATES  
 Gunther, Erik, Branford, CT, UNITED STATES  
 Stone, David J., Guilford, CT, UNITED STATES  
 Ellerman, Karen, Branford, CT, UNITED STATES  
 Gangolli, Esha A., Madison, CT, UNITED STATES

PI US 2003228301 A1 20031211  
 AI US 2001-4378 A1 20011024 (10)  
 PRAI US 2000-242882P 20001024 (60)  
 US 2000-242765P 20001024 (60)  
 US 2001-300206P 20010622 (60)  
 US 2000-242789P 20001024 (60)  
 US 2000-242768P 20001024 (60)  
 US 2000-242767P 20001024 (60)  
 US 2000-243622P 20001026 (60)  
 US 2001-273047P 20010302 (60)  
 US 2000-243591P 20001026 (60)  
 US 2000-243950P 20001027 (60)  
 US 2001-316509P 20010831 (60)  
 US 2000-243593P 20001026 (60)  
 US 2000-243502P 20001026 (60)  
 DT Utility  
 FS APPLICATION  
 LN.CNT 10092  
 INCL INCLM: 424/130.100  
 INCLS: 435/006.000; 435/183.000; 435/069.100; 435/320.100; 435/325.000;  
 530/350.000; 530/388.100; 536/023.200  
 NCL NCLM: 424/130.100  
 NCLS: 435/006.000; 435/183.000; 435/069.100; 435/320.100; 435/325.000;  
 530/350.000; 530/388.100; 536/023.200  
 IC [7]  
 ICM: C12Q001-68  
 ICS: C07H021-04; A61K039-395; C12P021-02; C12N005-06; C07K014-47;  
 C07K016-40

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 6 OF 60 USPATFULL on STN  
 AN 2003:301031 USPATFULL  
 TI **Novel human proteins**, polynucleotides  
 encoding them and methods of using the same  
 IN Spytek, Kimberly A., New Haven, CT, UNITED STATES  
 Li, Li, Branford, CT, UNITED STATES  
 Edinger, Shlomit R., New Haven, CT, UNITED STATES  
 Ellerman, Karen, Branford, CT, UNITED STATES  
 Stone, David J., Guilford, CT, UNITED STATES  
 Malyankar, Uriel M., Branford, CT, UNITED STATES  
 Shimkets, Richard A., Guilford, CT, UNITED STATES  
 Guo, Xiaojia Sasha, Branford, CT, UNITED STATES  
 Anderson, David W., Branford, CT, UNITED STATES  
 Patturajan, Meera, Branford, CT, UNITED STATES

Berghs, Constance, New Haven, CT, UNITED STATES  
 Gerlach, Valerie, Branford, CT, UNITED STATES  
 Gusev, Vladimir Y., Madison, CT, UNITED STATES  
 Kekuda, Ramesh, Norwalk, CT, UNITED STATES  
 Gorman, Linda, Branford, CT, UNITED STATES  
 Zerhusen, Bryan D., Branford, CT, UNITED STATES  
 Baumgartner, Jason C., New Haven, CT, UNITED STATES  
 Tchernev, Velizar T., Branford, CT, UNITED STATES  
 Vernet, Corine A.M., Branford, CT, UNITED STATES  
 Smithson, Glennda, Guilford, CT, UNITED STATES  
 Shenoy, Suresh G., Branford, CT, UNITED STATES  
 Liu, Xiaohong, Lexington, MA, UNITED STATES  
 MacDoughall, John R., Hamden, CT, UNITED STATES

PI US 2003212257 A1 20031113  
 AI US 2002-115482 A1 20020402 (10)  
 PRAI US 2001-281086P 20010403 (60)  
 US 2001-281136P 20010403 (60)  
 US 2001-281863P 20010405 (60)  
 US 2001-281906P 20010405 (60)  
 US 2001-282934P 20010410 (60)  
 US 2001-283512P 20010412 (60)  
 US 2001-285325P 20010419 (60)  
 US 2001-285890P 20010423 (60)  
 US 2001-286068P 20010424 (60)  
 US 2001-286292P 20010425 (60)  
 US 2001-287213P 20010427 (60)  
 US 2001-288257P 20010502 (60)  
 US 2001-291134P 20010515 (60)  
 US 2001-282020P 20010406 (60)  
 US 2001-291725P 20010517 (60)  
 US 2001-294771P 20010531 (60)  
 US 2001-296965P 20010608 (60)  
 US 2001-299128P 20010618 (60)  
 US 2001-305063P 20010712 (60)  
 US 2001-332780P 20011114 (60)  
 US 2002-345221P 20020104 (60)

DT Utility

FS APPLICATION

LN.CNT 13310

INCL INCLM: 530/350.000

NCL NCLM: 530/350.000

IC [7]

ICM: C07K001-00

ICS: C07K014-00; C07K017-00

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 7 OF 60 USPATFULL on STN

AN 2003:134090 USPATFULL

TI HUMAN PROTEINS HAVING TRANSMEMBRANE DOMAINS AND DNAS ENCODING THESE PROTEINS

IN KATO, SEISHI, KANAGAWA, JAPAN

SEKINE, SHINGO, SAITAMA, JAPAN

KIMURA, TOMOKO, KANAGAWA, JAPAN

KOBAYASHI, MIDORI, KANAGAWA, JAPAN

PI US 2003092175 A1 20030515

AI US 1999-284320 A1 19990621 (9)

WO 1997-JP4056 19971107

PRAI JP 1996-301429 19961113

DT Utility

FS APPLICATION

LN.CNT 5373

INCL INCLM: 435/365.100

INCLS: 536/023.500; 530/350.000; 435/069.100

NCL NCLM: 435/365.100

NCLS: 536/023.500; 530/350.000; 435/069.100  
IC [7]  
ICM: C12P021-06  
ICS: C12N005-10; C12N005-06; C07K017-00; C07H021-04; C07K014-00;  
C07K001-00

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 8 OF 60 USPATFULL on STN  
AN 2003:127105 USPATFULL  
TI Human NIM1 kinase  
IN Bandman, Olga, Mountain View, CA, UNITED STATES  
Molteni, Angela, Cantu, ITALY  
Magnaghi, Paola, UNITED STATES  
Bosotti, Roberta, Nerviano, ITALY  
Scacheri, Emanuela, UNITED STATES  
Isacchi, Antonella, UNITED STATES  
Hodgson, David M., Ann Arbor, MI, UNITED STATES  
PA Incyte Genomics, Inc., Palo Alto, CA (U.S. corporation)  
PI US 2003087317 A1 20030508  
AI US 2002-195101 A1 20020711 (10)  
RLI Continuation-in-part of Ser. No. US 2000-523849, filed on 13 Mar 2000,  
GRANTED, Pat. No. US 6458561  
DT Utility  
FS APPLICATION  
LN.CNT 3635  
INCL INCLM: 435/007.230  
INCLS: 435/069.100; 435/194.000; 435/320.100; 435/325.000; 536/023.200  
NCL NCLM: 435/007.230  
NCLS: 435/069.100; 435/194.000; 435/320.100; 435/325.000; 536/023.200  
IC [7]  
ICM: G01N033-574  
ICS: C07H021-04; C12N009-12; C12P021-02; C12N005-06  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 9 OF 60 USPATFULL on STN  
AN 2003:106251 USPATFULL  
TI Signal peptide-containing proteins  
IN Lal, Preeti G., Santa Clara, CA, UNITED STATES  
Au-Young, Janice, Brisbane, CA, UNITED STATES  
Reddy, Roopa, Sunnyvale, CA, UNITED STATES  
Murry, Lynn E., Fayetteville, AR, UNITED STATES  
Mathur, Preete, Fremont, CA, UNITED STATES  
PI US 2003073162 A1 20030417  
AI US 2001-968433 A1 20011001 (9)  
RLI Continuation-in-part of Ser. No. US 1999-271110, filed on 17 Mar 1999,  
ABANDONED Continuation-in-part of Ser. No. US 1997-966316, filed on 7  
Nov 1997, GRANTED, Pat. No. US 5932445  
DT Utility  
FS APPLICATION  
LN.CNT 3950  
INCL INCLM: 435/069.100  
INCLS: 435/070.300; 435/183.000; 435/320.100; 435/325.000; 435/326.000;  
530/350.000; 530/388.100; 536/023.500  
NCL NCLM: 435/069.100  
NCLS: 435/070.300; 435/183.000; 435/320.100; 435/325.000; 435/326.000;  
530/350.000; 530/388.100; 536/023.500  
IC [7]  
ICM: C07K014-435  
ICS: C12P021-02; C07H021-04; C12P021-04; C12N009-00; C12N005-06  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 10 OF 60 USPATFULL on STN  
AN 2003:93131 USPATFULL  
TI Novel human **ion channel** proteins and polynucleotides



encoding the same

IN Walke, D. Wade, Spring, TX, UNITED STATES  
 Mathur, Brian, The Woodlands, TX, UNITED STATES  
 Turner, C. Alexander, JR., The Woodlands, TX, UNITED STATES  
 Friddle, Carl Johan, The Woodlands, TX, UNITED STATES  
 Gerhardt, Brenda, Spring, TX, UNITED STATES

PI US 2003064490 A1 20030403  
 AI US 2001-918359 A1 20010730 (9)  
 PRAI US 2000-221643P 20000728 (60)  
 US 2000-222503P 20000802 (60)

DT Utility  
 FS APPLICATION  
 LN.CNT 1283

INCL INCLM: 435/183.000  
 INCLS: 435/069.100; 435/006.000; 435/325.000; 435/320.100; 536/023.200

NCL NCLM: 435/183.000  
 NCLS: 435/069.100; 435/006.000; 435/325.000; 435/320.100; 536/023.200

IC [7]  
 ICM: C12N009-00  
 ICS: C12Q001-68; C07H021-04; C12P021-02; C12N005-06

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 11 OF 60 USPATFULL on STN  
 AN 2003:71945 USPATFULL  
 TI **Novel human proteins**, polynucleotides  
 encoding them and methods of using the same

IN Taupier, Raymond J., JR., New Haven, CT, UNITED STATES  
 Padigar, Muralidhara, Branford, CT, UNITED STATES  
 Spytek, Kimberly A., New Haven, CT, UNITED STATES  
 Burgess, Catherine E., Wethersfield, CT, UNITED STATES  
 Vernet, Corine A.M., North Branford, CT, UNITED STATES  
 Fernandes, Elma R., Branford, CT, UNITED STATES  
 Shimkets, Richard A., West Haven, CT, UNITED STATES  
 Liu, Xiaohong, Branford, CT, UNITED STATES  
 Majumder, Kumud, Stamford, CT, UNITED STATES  
 Colman, Steven D., Guilford, CT, UNITED STATES  
 Zerhusen, Bryan D., Branford, CT, UNITED STATES

PI US 2003050232 A1 20030313  
 AI US 2001-839446 A1 20010419 (9)  
 PRAI US 2000-198293P 20000419 (60)  
 US 2000-198645P 20000420 (60)  
 US 2000-210809P 20000609 (60)  
 US 2000-199476P 20000425 (60)  
 US 2000-200025P 20000426 (60)  
 US 2000-224610P 20000811 (60)  
 US 2000-200024P 20000426 (60)  
 US 2000-199880P 20000426 (60)  
 US 2000-218591P 20000717 (60)  
 US 2001-271814P 20010227 (60)

DT Utility  
 FS APPLICATION  
 LN.CNT 6226

INCL INCLM: 514/012.000  
 INCLS: 536/023.200; 435/069.100; 435/189.000; 435/325.000; 435/320.100

NCL NCLM: 514/012.000  
 NCLS: 536/023.200; 435/069.100; 435/189.000; 435/325.000; 435/320.100

IC [7]  
 ICM: A61K038-17  
 ICS: C07H021-04; C12N009-02; C12P021-02; C12N005-06

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 12 OF 60 USPATFULL on STN  
 AN 2003:30282 USPATFULL  
 TI Isolated human kinase proteins, nucleic acid molecules encoding human

kinase proteins, and uses thereof

IN Yan, Chunhua, Boyd, MD, UNITED STATES  
 Ketchum, Karen A., Germantown, MD, UNITED STATES  
 Di Francesco, Valentina, Rockville, MD, UNITED STATES  
 Beasley, Ellen M., Darnestown, MD, UNITED STATES

PA APPLERA CORPORATION, Norwalk, CT, UNITED STATES, 06856-5435 (U.S. corporation)

PI US 2003022229 A1 20030130  
 US 6730506 B2 20040504

AI US 2002-224562 A1 20020821 (10)

RLI Division of Ser. No. US 2001-801861, filed on 9 Mar 2001, PENDING

PRAI US 2001-265151P 20010131 (60)

DT Utility

FS APPLICATION

LN.CNT 3707

INCL INCLM: 435/006.000  
 INCLS: 435/069.100; 435/194.000; 435/320.100; 435/325.000; 536/023.200

NCL NCLM: 435/194.000  
 NCLS: 530/350.000; 435/006.000; 435/252.300; 435/320.100; 435/325.000

IC [7]  
 ICM: C12Q001-68  
 ICS: C07H021-04; C12N009-12; C12P021-02; C12N005-06

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 13 OF 60 USPATFULL on STN

AN 2002:337390 USPATFULL

TI Human polynucleotides, polypeptides, and antibodies

IN Moore, Paul A., Germantown, MD, UNITED STATES  
 Coleman, Timothy A., Gaithersburg, MD, UNITED STATES  
 Gentz, Reiner L., Rockville, MD, UNITED STATES  
 Dillon, Patrick J., Carlsbad, CA, UNITED STATES  
 Ni, Jian, Germantown, MD, UNITED STATES  
 Li, Yi, Sunnyvale, CA, UNITED STATES  
 Endress, Gregory A., Florence, MA, UNITED STATES  
 Soppet, Daniel R., Centreville, VA, UNITED STATES

PI US 2002192749 A1 20021219

AI US 2001-969384 A1 20011003 (9)

RLI Continuation-in-part of Ser. No. WO 2001-US10542, filed on 2 Apr 2001, UNKNOWN

PRAI US 2000-194118P 20000403 (60)  
 US 2000-236384P 20000929 (60)

DT Utility

FS APPLICATION

LN.CNT 13925

INCL INCLM: 435/069.100  
 INCLS: 435/183.000; 435/325.000; 435/320.100; 530/350.000; 536/023.200

NCL NCLM: 435/069.100  
 NCLS: 435/183.000; 435/325.000; 435/320.100; 530/350.000; 536/023.200

IC [7]  
 ICM: C12P021-02  
 ICS: C12N005-06; C07H021-04; C12N009-00; C07K014-435

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 14 OF 60 USPATFULL on STN

AN 2002:287612 USPATFULL

TI Novel human **ion channel** protein and polynucleotides encoding the same

IN Friddle, Carl Johan, The Woodlands, TX, UNITED STATES  
 Hilbun, Erin, Houston, TX, UNITED STATES  
 Turner, C. Alexander, JR., The Woodlands, TX, UNITED STATES

PI US 2002160475 A1 20021031

AI US 2001-16647 A1 20011210 (10)

PRAI US 2000-257932P 20001220 (60)

DT Utility

FS APPLICATION

LN.CNT 1081

INCL INCLM: 435/183.000

INCLS: 536/023.200

NCL NCLM: 435/183.000

NCLS: 536/023.200

IC [7]

ICM: C07H021-04

ICS: C12N009-00

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 15 OF 60 USPATFULL on STN

AN 2002:272888 USPATFULL

TI Human polynucleotides, polypeptides, and antibodies

IN Ni, Jian, Germantown, MD, UNITED STATES

Shi, Yanggu, Gaithersburg, MD, UNITED STATES

Ebner, Reinhard, Gaithersburg, MD, UNITED STATES

Ruben, Steven M., Olney, MD, UNITED STATES

PA Human Genome Sciences, Inc., Rockville, MD, UNITED STATES, 20850 (U.S. corporation)

PI US 2002151009 A1 20021017

AI US 2001-939825 A1 20010828 (9)

RLI Continuation-in-part of Ser. No. WO 2001-US5498, filed on 22 Feb 2001, UNKNOWN

PRAI US 2000-184664P 20000224 (60)

US 2000-189874P 20000316 (60)

DT Utility

FS APPLICATION

LN.CNT 14831

INCL INCLM: 435/183.000

INCLS: 435/006.000; 435/069.100; 435/325.000; 435/320.100; 536/023.200

NCL NCLM: 435/183.000

NCLS: 435/006.000; 435/069.100; 435/325.000; 435/320.100; 536/023.200

IC [7]

ICM: C12N009-00

ICS: C12Q001-68; C07H021-04; C12P021-02; C12N005-06

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 16 OF 60 USPATFULL on STN

AN 2002:258806 USPATFULL

TI Isolated human transporter proteins, nucleic acid molecules encoding human transporter proteins, and uses thereof

IN Merkulov, Gennady, Baltimore, MD, UNITED STATES

Guegler, Karl, Menlo Park, CA, UNITED STATES

Brandon, Rhonda C., Laytonsville, MD, UNITED STATES

Di Francesco, Valentina, Rockville, MD, UNITED STATES

Beasley, Ellen M., Darnestown, MD, UNITED STATES

PI US 2002142376 A1 20021003

AI US 2001-768781 A1 20010125 (9)

RLI Continuation-in-part of Ser. No. US 2000-740034, filed on 20 Dec 2000, ABANDONED

DT Utility

FS APPLICATION

LN.CNT 3248

INCL INCLM: 435/069.100

INCLS: 435/183.000; 435/325.000; 435/320.100; 530/350.000; 536/023.500

NCL NCLM: 435/069.100

NCLS: 435/183.000; 435/325.000; 435/320.100; 530/350.000; 536/023.500

IC [7]

ICM: C12P021-02

ICS: C12N005-06; C07K014-435; C07H021-04; C12N009-00

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 17 OF 60 USPATFULL on STN

AN 2002:228449 USPATFULL  
 TI **Novel human proteins**, polynucleotides  
 encoding them and methods of using the same  
 IN Gerlach, Valerie L., Branford, CT, UNITED STATES  
 Ellerman, Karen, Branford, CT, UNITED STATES  
 MacDougall, John R., Hamden, CT, UNITED STATES  
 Smithson, Glennnda, Guilford, CT, UNITED STATES  
 PI US 2002123612 A1 20020905  
 AI US 2001-898570 A1 20010703 (9)  
 PRAI US 2000-198293P 20000419 (60)  
 US 2000-198645P 20000420 (60)  
 US 2000-210809P 20000609 (60)  
 US 2000-199476P 20000425 (60)  
 US 2000-200025P 20000426 (60)  
 US 2000-224610P 20000811 (60)  
 US 2000-200024P 20000426 (60)  
 US 2000-199880P 20000426 (60)  
 US 2000-218591P 20000717 (60)  
 US 2001-271814P 20010227 (60)  
 US 2000-215855P 20000703 (60)  
 DT Utility  
 FS APPLICATION  
 LN.CNT 7507  
 INCL INCLM: 530/350.000  
 INCLS: 435/069.100; 435/325.000; 435/320.100; 536/023.500  
 NCL NCLM: 530/350.000  
 NCLS: 435/069.100; 435/325.000; 435/320.100; 536/023.500  
 IC [7]  
 ICM: C07K014-435  
 ICS: C07H021-04; C12P021-02; C12N005-06  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 18 OF 60 USPATFULL on STN  
 AN 2002:221403 USPATFULL  
 TI **ISOLATED HUMAN KINASE PROTEINS, NUCLEIC ACID MOLECULES ENCODING HUMAN**  
**KINASE PROTEINS, AND USES THEREOF**  
 IN Yan, Chunhua, Boyds, MD, UNITED STATES  
 Ketchum, Karen A., Germantown, MD, UNITED STATES  
 Di Francesco, Valentina, Rockville, MD, UNITED STATES  
 Beasley, Ellen M., Darnestown, MD, UNITED STATES  
 PI US 2002119544 A1 20020829  
 US 6492154 B2 20021210  
 AI US 2001-801861 A1 20010309 (9)  
 PRAI US 2001-265151P 20010131 (60)  
 DT Utility  
 FS APPLICATION  
 LN.CNT 3706  
 INCL INCLM: 435/194.000  
 INCLS: 435/069.100; 435/320.100; 435/325.000; 536/023.200  
 NCL NCLM: 435/194.000  
 NCLS: 435/252.300; 435/320.100; 435/325.000; 536/023.200  
 IC [7]  
 ICM: C12N009-12  
 ICS: C07H021-04; C12P021-02; C12N005-06  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 19 OF 60 USPATFULL on STN  
 AN 2002:221399 USPATFULL  
 TI **Novel human ion channel** protein and polynucleotides  
 encoding the same  
 IN Friddle, Carl Johan, The Woodlands, TX, UNITED STATES  
 Hilbun, Erin, Houston, TX, UNITED STATES  
 Gerhardt, Brenda, Spring, TX, UNITED STATES  
 Turner, C. Alexander, JR., The Woodlands, TX, UNITED STATES

PI US 2002119540 A1 20020829  
AI US 2001-974712 A1 20011010 (9)  
PRAI US 2000-239623P 20001010 (60)  
DT Utility  
FS APPLICATION  
LN.CNT 1086  
INCL INCLM: 435/183.000  
INCLS: 536/023.200  
NCL NCLM: 435/183.000  
NCLS: 536/023.200  
IC [7]  
ICM: C07H021-04  
ICS: C12N009-00

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 20 OF 60 USPATFULL on STN  
AN 2002:221382 USPATFULL  
TI Novel human **ion channel**-related proteins and  
polynucleotides encoding the same  
IN Friddle, Carl Johan, The Woodlands, TX, UNITED STATES  
Gerhardt, Brenda, Spring, TX, UNITED STATES  
Hilbun, Erin, Houston, TX, UNITED STATES  
Turner, C. Alexander, JR., The Woodlands, TX, UNITED STATES  
PI US 2002119522 A1 20020829  
AI US 2001-24579 A1 20011218 (10)  
PRAI US 2000-258595P 20001228 (60)  
DT Utility  
FS APPLICATION  
LN.CNT 1385  
INCL INCLM: 435/069.100  
INCLS: 536/023.200; 435/320.100; 435/325.000; 530/350.000  
NCL NCLM: 435/069.100  
NCLS: 536/023.200; 435/320.100; 435/325.000; 530/350.000  
IC [7]  
ICM: C12P021-02  
ICS: C12N005-06; C07H021-04; C07K014-435

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 21 OF 60 USPATFULL on STN  
AN 2002:206777 USPATFULL  
TI Novel human **ion channel** protein and polynucleotides  
encoding the same  
IN Yu, Xuanchuan Sean, Houston, TX, UNITED STATES  
Miranda, Maricar, Houston, TX, UNITED STATES  
PI US 2002111478 A1 20020815  
AI US 2001-34843 A1 20011227 (10)  
PRAI US 2000-258334P 20001227 (60)  
DT Utility  
FS APPLICATION  
LN.CNT 1085  
INCL INCLM: 536/023.500  
INCLS: 530/350.000  
NCL NCLM: 536/023.500  
NCLS: 530/350.000  
IC [7]  
ICM: C07H021-04  
ICS: C07K014-435

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 22 OF 60 USPATFULL on STN  
AN 2002:148637 USPATFULL  
TI Novel human **ion channel** proteins and polynucleotides  
encoding the same  
IN Turner, C. Alexander, JR., The Woodlands, TX, UNITED STATES

Mathur, Daniel, Wooster, OH, UNITED STATES  
Mathur, Brian, The Woodlands, TX, UNITED STATES

PI US 2002076780 A1 20020620  
AI US 2001-930871 A1 20010814 (9)  
PRAI US 2000-225989P 20000816 (60)

DT Utility  
FS APPLICATION

LN.CNT 3707

INCL INCLM: 435/183.000  
INCLS: 530/350.000; 536/023.200

NCL NCLM: 435/183.000  
NCLS: 530/350.000; 536/023.200

IC [7]  
ICM: C12N009-00  
ICS: C07H021-04

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 23 OF 60 USPATFULL on STN

AN 2002:105903 USPATFULL

TI Human Sec6 vesicle transport protein

IN Labrie, Samuel T., St. Peters, MO, UNITED STATES  
Streeter, David G., Boulder Creek, CA, UNITED STATES

PI US 2002055108 A1 20020509  
AI US 2001-881852 A1 20010613 (9)

RLI Continuation-in-part of Ser. No. US 1999-349635, filed on 8 Jul 1999,  
ABANDONED Continuation-in-part of Ser. No. US 1997-941262, filed on 30  
Sep 1997, GRANTED, Pat. No. US 5989818

DT Utility  
FS APPLICATION

LN.CNT 2378

INCL INCLM: 435/006.000  
INCLS: 435/183.000; 435/069.100; 435/325.000; 435/320.100; 536/023.200

NCL NCLM: 435/006.000  
NCLS: 435/183.000; 435/069.100; 435/325.000; 435/320.100; 536/023.200

IC [7]  
ICM: C12Q001-68  
ICS: C07H021-04; C12N009-00; C12P021-02; C12N005-06

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 24 OF 60 USPATFULL on STN

AN 2002:78847 USPATFULL

TI Novel human **ion channel** protein and polynucleotides  
encoding the same

IN Hu, Yi, The Woodlands, TX, UNITED STATES  
Kieke, James Alvin, Houston, TX, UNITED STATES  
Turner, C. Alexander, JR., The Woodlands, TX, UNITED STATES  
Nehls, Michael C., Stockdorf, GERMANY, FEDERAL REPUBLIC OF  
Friedrich, Glenn, Houston, TX, UNITED STATES  
Zambrowicz, Brian, The Woodlands, TX, UNITED STATES  
Sands, Arthur T., The Woodlands, TX, UNITED STATES

PI US 2002042505 A1 20020411  
AI US 2001-825147 A1 20010403 (9)  
PRAI US 2000-194255P 20000403 (60)

DT Utility  
FS APPLICATION

LN.CNT 1142

INCL INCLM: 536/023.200  
INCLS: 435/183.000

NCL NCLM: 536/023.200  
NCLS: 435/183.000

IC [7]  
ICM: C07H021-04  
ICS: C12N009-00

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 25 OF 60 USPATFULL on STN  
 AN 2002:346980 USPATFULL  
 TI cDNAs coding for human proteins having transmembrane domains  
 IN Kato, Seishi, Sagamihara, JAPAN  
 Sekine, Shingo, Ageo, JAPAN  
 PA Sagami Chemical Research Center, Kanagawa, JAPAN (non-U.S. corporation)  
 Protogene, Inc., Tokyo, JAPAN (non-U.S. corporation)  
 PI US 6500939 B1 20021231  
 WO 9918199 19990415  
 AI US 2000-529157 20000821 (9)  
 WO 1998-JP4447 19981002  
 20000821 PCT 371 date  
 PRAI JP 1997-276270 19971008  
 DT Utility  
 FS GRANTED  
 LN.CNT 1696  
 INCL INCLM: 536/023.100  
 INCLS: 435/325.000; 435/320.100; 435/366.000  
 NCL NCLM: 536/023.100  
 NCLS: 435/320.100; 435/325.000; 435/366.000  
 IC [7]  
 ICM: C07H021-02  
 ICS: C07H021-04; C12N001-00; C12N015-00; C12N005-08  
 EXF 435/325; 435/320.1; 435/366; 435/23.1; 536/23.1  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 26 OF 60 PCTFULL COPYRIGHT 2004 Univentio on STN  
 AN 2002098900 PCTFULL ED 20021218 EW 200250  
 TIEN **NOVEL HUMAN PROTEINS, POLYNUCLEOTIDES**  
 ENCODING THEM AND METHODS OF USING THE SAME  
 TIFR NOUVELLES PROTEINES HUMAINES, POLYNUCLEOTIDES LES CODANT ET METHODES  
 D'UTILISATION ASSOCIEES  
 IN ZERHUSEN, Bryan, D., 337 Monticello Drive, Branford, CT 06405, US [US,  
 US];  
 KEKUDA, Ramesh, 71 Aiken Street, Unit R3, Norwalk, CT 06851, US [IN,  
 US];  
 SPYTEK, Kimberly, A., 28 Court Street, Number 1, New Haven, CT 06511, US  
 [US, US];  
 SHENOY, Suresh, G., 15 Millwood Drive, Branford, CT 06405, US [IN, US];  
 MILLER, Charles, E., 98 Saddle Hill Drive, Guilford, CT 06437, US [US,  
 US];  
 HJALT, Tord, 514 Main Street, Apartment 30, East Haven, CT 06512, US  
 [SE, US];  
 GERLACH, Valerie, L., 18 Rock Pasture Road, Branford, CT 06405, US [US,  
 US];  
 BAUMGARTNER, Jason, C., 1697 Quinnipiac Avenue, New Haven, CT 06513, US  
 [US, US];  
 GUO, Xiaojia, 713 Robert Frost Drive, Branford, CT 06405, US [CN, US];  
 GANGOLLI, Esha, A., 31 Strawberry Hill Road, Madison, CT 06443, US [IN,  
 US];  
 VERNET, Corine, A., M., Apartment L6, 1739 Foxon Road, Branford, CT  
 06471, US [FR, US];  
 PADIGARU, Muralidhara, 71 Hampton Park, Branford, CT 06405, US [IN, US];  
 LI, Li, 56 Jerimoth Drive, Branford, CT 06405, US [CN, US];  
 PENA, Carol, E., A., 604 Orange Street, Number 2, New Haven, CT 06511,  
 US [US, US];  
 GORMAN, Linda, 329 Monticello Drive, Branford, CT 06405, US [US, US];  
 ANDERSON, David, W., 85 Montoya Drive, Branford, CT 06405, US [US, US];  
 EDINGER, Shlomit, R., 766 Edgewood Avenue, New Haven, CT 06515, US [US,  
 US];  
 PATTURAJAN, Meera, Apartment 1C, 45 Harrison Avenue, Branford, CT 06405,  
 US [IN, US];  
 STONE, David, J., 223 Whitehorn Drive, Guilford, CT 06437, US [US, US]

PA CURAGEN CORPORATION, 11th floor, 555 Long Wharf Drive, New Haven, CT 06511, US [US, US], for all designates States except US;  
 ZERHUSEN, Bryan, D., 337 Monticello Drive, Branford, CT 06405, US [US, US], for US only;  
 KEKUDA, Ramesh, 71 Aiken Street, Unit R3, Norwalk, CT 06851, US [IN, US], for US only;  
 SPYTEK, Kimberly, A., 28 Court Street, Number 1, New Haven, CT 06511, US [US, US], for US only;  
 SHENOY, Suresh, G., 15 Millwood Drive, Branford, CT 06405, US [IN, US], for US only;  
 MILLER, Charles, E., 98 Saddle Hill Drive, Guilford, CT 06437, US [US, US], for US only;  
 HJALT, Tord, 514 Main Street, Apartment 30, East Haven, CT 06512, US [SE, US], for US only;  
 GERLACH, Valerie, L., 18 Rock Pasture Road, Branford, CT 06405, US [US, US], for US only;  
 BAUMGARTNER, Jason, C., 1697 Quinnipiac Avenue, New Haven, CT 06513, US [US, US], for US only;  
 GUO, Xiaojia, 713 Robert Frost Drive, Branford, CT 06405, US [CN, US], for US only;  
 GANGOLLI, Esha, A., 31 Strawberry Hill Road, Madison, CT 06443, US [IN, US], for US only;  
 VERNET, Corine, A., M., Apartment L6, 1739 Foxon Road, Branford, CT 06471, US [FR, US], for US only;  
 PADIGARU, Muralidhara, 71 Hampton Park, Branford, CT 06405, US [IN, US], for US only;  
 LI, Li, 56 Jerimoth Drive, Branford, CT 06405, US [CN, US], for US only;  
 PENA, Carol, E., A., 604 Orange Street, Number 2, New Haven, CT 06511, US [US, US], for US only;  
 GORMAN, Linda, 329 Monticello Drive, Branford, CT 06405, US [US, US], for US only;  
 ANDERSON, David, W., 85 Montoya Drive, Branford, CT 06405, US [US, US], for US only;  
 EDINGER, Shlomit, R., 766 Edgewood Avenue, New Haven, CT 06515, US [US, US], for US only;  
 PATTURAJAN, Meera, Apartment 1C, 45 Harrison Avenue, Branford, CT 06405, US [IN, US], for US only;  
 STONE, David, J., 223 Whitehorn Drive, Guilford, CT 06437, US [US, US], for US only

AG ELRIFI, Ivor, R., Mintz, Levin, Cohn, Ferris, Glovsky, and Popeo, P., C., One Financial Center, Boston, MA 02111, US

LAF English

LA English

DT Patent

PI WO 2002098900 A2 20021212

DS W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU  
 CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN  
 IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN  
 MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM  
 TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW  
 RW (ARIPO): GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW  
 RW (EAPO): AM AZ BY KG KZ MD RU TJ TM  
 RW (EPO): AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
 RW (OAPI): BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

AI WO 2002-US17558 A 20020604

PRAI US 2001-60/295,661 20010604  
 US 2001-60/295,607 20010604  
 US 2001-60/296,404 20010606  
 US 2001-60/296,418 20010606  
 US 2001-60/296,575 20010607  
 US 2001-60/297,414 20010611  
 US 2001-60/297,567 20010612  
 US 2001-60/298,528 20010615  
 US 2001-60/299,133 20010618



US 2001-60/299,230	20010619
US 2001-60/299,949	20010621
US 2001-60/300,177	20010622
US 2001-60/300,883	20010626
US 2001-60/301,550	20010628
US 2001-60/301,530	20010628
US 2001-60/302,951	20010703
US 2001-60/318,727	20010912
US 2001-60/325,685	20010927
US 2002-60/358,814	20020222
US 2002-10/161,927	20020603

L3 ANSWER 27 OF 60 PCTFULL COPYRIGHT 2004 Univentio on STN  
AN 2002081629 PCTFULL ED 20021028 EW 200242  
TIEN **NOVEL HUMAN PROTEINS, POLYNUCLEOTIDES**  
ENCODING THEM AND METHODS OF USING THE SAME  
TIFR NOUVELLES PROTEINES HUMAINES, POLYNUCLEOTIDES CODANT CELLES-CI ET  
PROCEDE D'UTILISATION DE CEUX-CI  
IN SPYTEK, Kimberly, A., 28 Court Street, Number 1, New Haven, CT 06511, US  
[US, US];  
LI, Li, 56 Jerimoth Road, Branford, CT 06405, US [CN, US];  
EDINGER, Shlomit, R., 766 Edgewood Avenue, New Haven, CT 06515, US [US,  
US];  
ELLERMAN, Karen, 87 Montoya Drive, Branford, CT 06405, US [US, US];  
STONE, David, J., 223 Whitethorn Drive, Guilford, CT 06437, US [US, US];  
MALYANKAR, Uriel, M., 229 Branford Road, Number 330, Branford, CT 06405,  
US [IN, US];  
SHIMKETS, Richard, A., 5 Indian Meadows Drive, Guilford, CT 06437, US  
[US, US];  
GUO, Xiaojia, 713 Robert Frost Drive, Branford, CT 06405, US [CN, US];  
ANDERSON, David, W., 85 Montoya Drive, Branford, CT 06405, US [US, US];  
PATTURAJAN, Meera, 45 Harrison Avenue, Apartment 1C, Branford, CT 06405,  
US [IN, US];  
BERGHS, Constance, 459 Orange Street, New Haven, CT 06511, US [NL, US];  
GERLACH, Valerie, 18 Rock Pasture Road, Branford, CT 06405, US [US, US];  
TAUPIER, Raymond, J., Jr., 34 Pardee Place Extension, East Haven, CT  
06512, US [US, US];  
PENA, Carol, E., A., 604 Orange Street, Number 2, New Haven, CT 06511,  
US [US, US];  
PADIGARU, Muralidhara, 71 Hampton Park, Branford, CT 06405, US [IN, US];  
LIU, Yi, 470 Prospect Street, Number 53, New Haven, CT 06511, US [CN,  
US];  
BURGESS, Catherine, E., 90 Carriage Hill Drive, Wethersfield, CT 06109,  
US [US, US];  
MILLER, Charles, E., 98 Saddle Hill Drive, Guilford, CT 06437, US [US,  
US];  
GUSEV, Vladimir, Y., 1209 Durham Road, Madison, CT 06443, US [UA, US];  
KEKUDA, Ramesh, 1213 Avalon Valley Drive, Danbury, CT 06810, US [IN,  
US];  
GORMAN, Linda, 392 Monticello Drive, Branford, CT 06405, US [US, US];  
ZERHUSEN, Bryan, D., 337 Monticello Drive, Branford, CT 06405, US [US,  
US];  
BAUMGARTNER, Jason, C., 1697 Quinnipiac Avenue, New Haven, CT 06513, US  
[US, US];  
TCHERNEV, Velizar, T., 45 Jefferson Road #3-12, Branford, CT 06405, US  
[BG, US];  
VERNET, Corine, A., M., 1739 Foxon Road, Apartment L6, Branford, CT  
06471, US [FR, US];  
SMITHSON, Glennda, 125 Michael Drive, Guildford, CT 06435, US [US, US];  
HEYES, Melvyn, P., 183 Townsend Avenue, Number 3, New Haven, CT 06512,  
US [GB, US];  
SHENOY, Suresh, G., 15 Millwood Drive, Branford, CT 06405, US [IN, US];  
LIU, Xiaohong, 96 Montoya Circle, Branford, CT 06405, US [US, US];  
GANGOLLI, Esha, A., 31 Strawberry Hill Road, Madison, CT 06443, US [IN,

US]

PA

CURAGEN CORPORATION, 555 Long Wharf Drive, 11th Floor, New Haven, CT 06511, US [US, US], for all designates States except US;  
SPYTEK, Kimberly, A., 28 Court Street, Number 1, New Haven, CT 06511, US [US, US], for US only;  
LI, Li, 56 Jerimoth Road, Branford, CT 06405, US [CN, US], for US only;  
EDINGER, Shlomit, R., 766 Edgewood Avenue, New Haven, CT 06515, US [US, US], for US only;  
ELLERMAN, Karen, 87 Montoya Drive, Branford, CT 06405, US [US, US], for US only;  
STONE, David, J., 223 Whitethorn Drive, Guilford, CT 06437, US [US, US], for US only;  
MALYANKAR, Uriel, M., 229 Branford Road, Number 330, Branford, CT 06405, US [IN, US], for US only;  
SHIMKETS, Richard, A., 5 Indian Meadows Drive, Guilford, CT 06437, US [US, US], for US only;  
GUO, Xiaojia, 713 Robert Frost Drive, Branford, CT 06405, US [CN, US], for US only;  
ANDERSON, David, W., 85 Montoya Drive, Branford, CT 06405, US [US, US], for US only;  
PATTURAJAN, Meera, 45 Harrison Avenue, Apartment 1C, Branford, CT 06405, US [IN, US], for US only;  
BERGHS, Constance, 459 Orange Street, New Haven, CT 06511, US [NL, US], for US only;  
GERLACH, Valerie, 18 Rock Pasture Road, Branford, CT 06405, US [US, US], for US only;  
TAUPIER, Raymond, J., Jr., 34 Pardee Place Extension, East Haven, CT 06512, US [US, US], for US only;  
PENA, Carol, E., A., 604 Orange Street, Number 2, New Haven, CT 06511, US [US, US], for US only;  
PADIGARU, Muralidhara, 71 Hampton Park, Branford, CT 06405, US [IN, US], for US only;  
LIU, Yi, 470 Prospect Street, Number 53, New Haven, CT 06511, US [CN, US], for US only;  
BURGESS, Catherine, E., 90 Carriage Hill Drive, Wethersfield, CT 06109, US [US, US], for US only;  
MILLER, Charles, E., 98 Saddle Hill Drive, Guilford, CT 06437, US [US, US], for US only;  
GUSEV, Vladimir, Y., 1209 Durham Road, Madison, CT 06443, US [UA, US], for US only;  
KEKUDA, Ramesh, 1213 Avalon Valley Drive, Danbury, CT 06810, US [IN, US], for US only;  
GORMAN, Linda, 392 Monticello Drive, Branford, CT 06405, US [US, US], for US only;  
ZERHUSEN, Bryan, D., 337 Monticello Drive, Branford, CT 06405, US [US, US], for US only;  
BAUMGARTNER, Jason, C., 1697 Quinnipiac Avenue, New Haven, CT 06513, US [US, US], for US only;  
TCHERNEV, Velizar, T., 45 Jefferson Road #3-12, Branford, CT 06405, US [BG, US], for US only;  
VERNET, Corine, A., M., 1739 Foxon Road, Apartment L6, Branford, CT 06471, US [FR, US], for US only;  
SMITHSON, Glennda, 125 Michael Drive, Guildford, CT 06435, US [US, US], for US only;  
HEYES, Melvyn, P., 183 Townsend Avenue, Number 3, New Haven, CT 06512, US [GB, US], for US only;  
SHENOY, Suresh, G., 15 Millwood Drive, Branford, CT 06405, US [IN, US], for US only;  
LIU, Xiaohong, 96 Montoya Circle, Branford, CT 06405, US [US, US], for US only;  
GANGOLLI, Esha, A., 31 Strawberry Hill Road, Madison, CT 06443, US [IN, US], for US only;  
AG ELRIFI, Ivor, R., Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, One Financial Center, Boston, MA 02111, US

LAF English  
 LA English  
 DT Patent  
 PI WO 2002081629 A2 20021017  
 DS W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU  
 CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN  
 IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN  
 MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM  
 TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW  
 RW (ARIPO): GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW  
 RW (EAPO): AM AZ BY KG KZ MD RU TJ TM  
 RW (EPO): AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
 RW (OAPI): BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
 AI WO 2002-US10522 A 20020403  
 PRAI US 2001-60/281,136 20010403  
 US 2001-60/281,086 20010403  
 US 2001-60/281,906 20010405  
 US 2001-60/281,863 20010405  
 US 2001-60/282,934 20010410  
 US 2001-60/283,512 20010412  
 US 2001-60/285,325 20010419  
 US 2001-60/285,890 20010423  
 US 2001-60/286,068 20010424  
 US 2001-60/286,292 20010425  
 US 2001-60/287,213 20010427  
 US 2001-60/288,257 20010502  
 US 2001-60/291,134 20010512  
 US 2001-60/282,020 20010515  
 US 2001-60/291,725 20010517  
 US 2001-60/294,771 20010531  
 US 2001-60/296,965 20010608  
 US 2001-60/299,128 20010618  
 US 2001-60/305,063 20010712  
 US 2001-60/332,780 20011114  
 US 2002-60/345,221 20020104  
 US 2002-unknown 20020402  
 L3 ANSWER 28 OF 60 PCTFULL COPYRIGHT 2004 Univention on STN  
 AN 2002072861 PCTFULL ED 20020927 EW 200238  
 TIEN CD53 CELL SURFACE ANTIGEN  
 TIFR ANTIGENE DE SURFACE CELLULAIRE CD53  
 IN LAL, Preeti, G., P.O. Box 5142, Santa Clara, CA 95056, US [IN, US]  
 PA INCYTE GENOMICS, INC., 3160 Porter Drive, Palo Alto, CA 94304, US [US,  
 US], for all designates States except US;  
 LAL, Preeti, G., P.O. Box 5142, Santa Clara, CA 95056, US [IN, US], for  
 US only  
 AG STREETER, David, G., Incyte Genomics, Inc., 3160 Porter Drive, Palo  
 Alto, CA 94304, US  
 LAF English  
 LA English  
 DT Patent  
 PI WO 2002072861 A1 20020919  
 DS W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU  
 CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN  
 IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN  
 MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM  
 TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW  
 RW (ARIPO): GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW  
 RW (EAPO): AM AZ BY KG KZ MD RU TJ TM  
 RW (EPO): AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
 RW (OAPI): BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
 AI WO 2002-US7054 A 20020307  
 PRAI US 2001-09/803,478 20010308  
 ICM C12P021-06

ICS C12P021-04 ; C07H021-04

L3 ANSWER 29 OF 60 PCTFULL COPYRIGHT 2004 Univentio on STN  
AN 2002072831 PCTFULL ED 20020927 EW 200238  
TIEN ISOLATED HUMAN TRANSPORTER PROTEINS, NUCLEIC ACID MOLECULES ENCODING  
HUMAN TRANSPORTER PROTEINS, AND USES THEREOF  
TIFR PROTEINES TRANSPORTEURS HUMAINES ISOLEES, MOLECULES D'ACIDES NUCLEIQUES  
CODANT DES PROTEINES TRANSPORTEURS HUMAINES, ET UTILISATIONS ASSOCIEES  
IN MERKULOV, Gennady, Celera Genomics, 45 West Gude Drive C2-4#21,  
Rockville, MD 20850, US;  
GUEGLER, Karl, Celera Genomics, 45 West Gude Drive C2-4#21, Rockville,  
MD 20850, US;  
BRANDON, Rhonda, C., Celera Genomics, 45 West Gude Drive C2-4#21,  
Rockville, MD 20850, US;  
DI FRANCESCO, Valentina, Celera Genomics Corporation, 45 West Gude Drive  
C2-4#21, Rockville, MD 20850, US;  
BEASLEY, Ellen, M., Celera Genomics, 45 West Gude Drive C2-4#21,  
Rockville, MD 20850, US  
PA PE CORPORATION (NY), 761 Main Avenue, Norwalk, CT 06859, US [US, US]  
LAF English  
LA English  
DT Patent  
PI WO 2002072831 A2 20020919  
DS W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU  
CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN  
IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN  
MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM  
TN TR TT TZ UA UG UZ VN YU ZA ZM ZW  
RW (ARIPO): GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW  
RW (EAPO): AM AZ BY KG KZ MD RU TJ TM  
RW (EPO): AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
RW (OAPI): BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
AI WO 2002-US929 A 20020115  
PRAI US 2001-09/768,781 20010125  
ICM C12N015-12  
ICS C07K014-705 ; C07K016-28 ; C12Q001-68 ; G01N033-68 ;  
A01K067-027 ;  
A61K039-395

L3 ANSWER 30 OF 60 PCTFULL COPYRIGHT 2004 Univentio on STN  
AN 2002068626 PCTFULL ED 20020916 EW 200236  
TIEN NOVEL HUMAN ION CHANNEL-RELATED PROTEINS AND  
POLYNUCLEOTIDES ENCODING THE SAME  
TIFR NOUVELLES PROTEINES HUMAINES LIEES AU CANAL IONIQUE ET POLYNUCLEOTIDES  
CODANT POUR CES PROTEINES  
IN FRIDDLE, Carl, Johan, 127 S. Goldenvine Circle, The Woodlands, TX 77382,  
US;  
GERHARDT, Brenda, 2123 Knollbrook Lane, Spring, TX 77373, US;  
HILBUN, Erin, 10901 Mist Line Apt. 2108, Houston, TX 77070, US;  
TURNER, C., Alexander, Jr., 67 Winter Wheat Place, The Woodlands, TX  
77381, US  
PA LEXICON GENETICS INCORPORATED, 4000 Research Forest Drive, The  
Woodlands, TX 77381, US [US, US]  
AG ISHIMOTO, Lance, K., Lexicon Genetics Incorporated, 4000 Research Forest  
Drive, The Woodlands, TX 77381, US  
LAF English  
LA English  
DT Patent  
PI WO 2002068626 A2 20020906  
DS W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU  
CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN  
IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN  
MW MX MZ NO NZ PH PL PT RO RU SD SE SG SI SK SL TJ TM TR  
TT TZ UA UG UZ VN YU ZA ZW

RW (ARIPO): GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW  
 RW (EAPO): AM AZ BY KG KZ MD RU TJ TM  
 RW (EPO): AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
 RW (OAPI): BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
 AI WO 2001-US49197 A 20011218  
 PRAI US 2000-60/258,595 20001228  
 ICM C12N015-00  
  
 L3 ANSWER 31 OF 60 PCTFULL COPYRIGHT 2004 Univentio on STN  
 AN 2002061060 PCTFULL ED 20020815 EW 200232  
 TIEN ISOLATED HUMAN KINASE PROTEINS, NUCLEIC ACID MOLECULES ENCODING HUMAN  
 KINASE PROTEINS, AND USES THEREOF  
 TIFR PROTEINES KINASES HUMAINES ISOLEES, MOLECULE D'ACIDE NUCLEIQUE CODANT  
 CES PROTEINES KINASES HUMAINES ET LEURS UTILISATIONS  
 IN YAN, Chunhua, Celera Genomics, 45 West Gude Drive C2-4#20, Rockville, MD  
 20850, US;  
 KETCHUM, Karen, Celera Genomics, 45 West Gude Drive C2-4#21, Rockville,  
 MD 20850, US;  
 DI FRANCESCO, Valentina, Celera Genomics, 45 West Gude Drive C2-4#21,  
 Rockville, MD 20850, US;  
 BEASLEY, Ellen, M., Celera Genomics, 45 West Gude Drive C2-4#20,  
 Rockville, MD 20850, US  
 PA PE CORPORATION (NY), 761 Main Avenue, Norwalk, CT 06859, US [US, US]  
 LAF English  
 LA English  
 DT Patent  
 PI WO 2002061060 A2 20020808  
 DS W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU  
 CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN  
 IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN  
 MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM  
 TN TR TT TZ UA UG UZ VN YU ZA ZM ZW  
 RW (ARIPO): GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW  
 RW (EAPO): AM AZ BY KG KZ MD RU TJ TM  
 RW (EPO): AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
 RW (OAPI): BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
 AI WO 2002-US1106 A 20020117  
 PRAI US 2001-60/265,151 20010131  
 US 2001-09/801,861 20010309  
 ICM C12N009-00  
  
 L3 ANSWER 32 OF 60 PCTFULL COPYRIGHT 2004 Univentio on STN  
 AN 2002060945 PCTFULL ED 20020815 EW 200232  
 TIEN NOVEL HUMAN **ION CHANNEL** PROTEIN AND POLYNUCLEOTIDES  
 ENCODING THE SAME  
 TIFR NOUVELLE PROTEINE HUMAINE DE CANAUX IONIQUES ET POLYPEPTIDES LA CODANT  
 IN YU, Xuanchuan, 7900 N. Stadium #101, Houston, TX 77030, US;  
 MIRANDA, Maricar, 1800 El Paseo, Apt. 1708, Houston, TX 77054, US  
 PA LEXICON GENETICS INCORPORATED, 4000 Research Forest Drive, The  
 Woodlands, TX 77381, US [US, US]  
 AG ISHIMOTO, Lance, K., LEXICON GENETICS INCORPORATED, 4000 Research Forest  
 Drive, The Woodlands, TX 77381, US  
 LAF English  
 LA English  
 DT Patent  
 PI WO 2002060945 A2 20020808  
 DS W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU  
 CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN  
 IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN  
 MW MX MZ NO NZ PH PL PT RO RU SD SE SG SI SK SL TJ TM TR  
 TT TZ UA UG UZ VN YU ZA ZW  
 RW (ARIPO): GH GM KE LS MW MZ SD SL SZ TZ UG ZW  
 RW (EAPO): AM AZ BY KG KZ MD RU TJ TM  
 RW (EPO): AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

RW (OAPI): BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
 AI WO 2001-US49488 A 20011227  
 PRAI US 2000-60/258,334 20001227  
 ICM C07K014-47

L3 ANSWER 33 OF 60 PCTFULL COPYRIGHT 2004 Univentio on STN  
 AN 2002055702 PCTFULL ED 20020725 EW 200229  
 TIEN **NOVEL HUMAN PROTEINS**, POLYNUCLEOTIDES  
 ENCODING THEM AND METHODS OF USING THE SAME  
 TIFR PROTEINES HUMAINES, POLYNUCLEOTIDES LES CODANT ET PROCEDES D'UTILISATION  
 CORRESPONDANTS  
 IN GANGOLLI, Esha, A., 31 Strawberry Hill Road, Madison, CT 06443, US [IN,  
 US];  
 SPYTEK, Kimberly, A., 28 Court Street #1, New Haven, CT 06511, US [US,  
 US];  
 GILBERT, Jennifer, 343 Horsepond Road, Madison, CT 06443, US [US, US];  
 CASMAN, Stacie, 17 Peck Street, North Haven, CT 06511, US [US, US];  
 BLALOCK, Angela, 140 Mill Street, Apartement 315, Branford, CT 06405, US  
 [US, US];  
 LI, Li, 56 Jerimoth Drive, Branford, CT 06405, US [CN, US];  
 VERNET, Corine, A., M., 1739 Foxon Road, Box L6, North Branford, CT  
 06471, US [FR, US];  
 SHENOY, Suresh, 15 Milwood Drive, Branford, CT 06405, US [IN, US];  
 MISHRA, Vishnu, 3832 SW 93rd Terrace, Gainesville, FL 32608, US [IN,  
 US];  
 FURTAK, Katarzyna, 31 Park Place, Ansonia, CT 06401, US [PL, US];  
 GERLACH, Valerie, 18 Rock Pasture Road, Branford, CT 06405, US [US, US];  
 EDINGER, Shlomit, 766 Edgewood Avenue, New Haven, CT 06515, US [US, US];  
 MALYANKAR, Uriel, 229 Brandford Road #330, Branford, CT 06405, US [IN,  
 US];  
 STONE, David, 223 Whitethorn Drive, Guilford, CT 06437, US [US, US];  
 MILLET, Isabelle, 74 Carrington Avenue, Milford, CT 06460, US [FR, US];  
 SMITHSON, Glennda, 125 Michael Drive, Guilford, CT 06435, US [US, US];  
 GUNTHER, Erik, 34 Bryan Road, Branford, CT 06405, US [US, US];  
 PADIGARU, Muralidhara, 71 Hampton Park, Branford, CT 06405, US [IN, US];  
 TAUPIER, Raymond, J., Jr., 34 Pardee Place Extension, East Haven, CT  
 06512, US [US, US];  
 ANDERSON, David, 43A Linden Avenue, Brandord, CT 06405, US [US, US]  
 PA CURAGEN CORPORATION, 555 Long Wharf Drive, 11th floor, New Haven, CT  
 06511, US [US, US], for all designates States except US;  
 GANGOLLI, Esha, A., 31 Strawberry Hill Road, Madison, CT 06443, US [IN,  
 US], for US only;  
 SPYTEK, Kimberly, A., 28 Court Street #1, New Haven, CT 06511, US [US,  
 US], for US only;  
 GILBERT, Jennifer, 343 Horsepond Road, Madison, CT 06443, US [US, US],  
 for US only;  
 CASMAN, Stacie, 17 Peck Street, North Haven, CT 06511, US [US, US], for  
 US only;  
 BLALOCK, Angela, 140 Mill Street, Apartement 315, Branford, CT 06405, US  
 [US, US], for US only;  
 LI, Li, 56 Jerimoth Drive, Branford, CT 06405, US [CN, US], for US only;  
 VERNET, Corine, A., M., 1739 Foxon Road, Box L6, North Branford, CT  
 06471, US [FR, US], for US only;  
 SHENOY, Suresh, 15 Milwood Drive, Branford, CT 06405, US [IN, US], for  
 US only;  
 MISHRA, Vishnu, 3832 SW 93rd Terrace, Gainesville, FL 32608, US [IN,  
 US], for US only;  
 FURTAK, Katarzyna, 31 Park Place, Ansonia, CT 06401, US [PL, US], for US  
 only;  
 GERLACH, Valerie, 18 Rock Pasture Road, Branford, CT 06405, US [US, US],  
 for US only;  
 EDINGER, Shlomit, 766 Edgewood Avenue, New Haven, CT 06515, US [US, US],  
 for US only;  
 MALYANKAR, Uriel, 229 Brandford Road #330, Branford, CT 06405, US [IN,

US], for US only;  
STONE, David, 223 Whitethorn Drive, Guilford, CT 06437, US [US, US], for US only;  
MILLET, Isabelle, 74 Carrington Avenue, Milford, CT 06460, US [FR, US], for US only;  
SMITHSON, Glenda, 125 Michael Drive, Guilford, CT 06435, US [US, US], for US only;  
GUNTHER, Erik, 34 Bryan Road, Branford, CT 06405, US [US, US], for US only;  
PADIGARU, Muralidhara, 71 Hampton Park, Branford, CT 06405, US [IN, US], for US only;  
TAUPIER, Raymond, J., Jr., 34 Pardee Place Extension, East Haven, CT 06512, US [US, US], for US only;  
ANDERSON, David, 43A Linden Avenue, Brandford, CT 06405, US [US, US], for US only

AG ELRIFI, Ivor, R., Mintz, Levin, Cohn, Ferris, Glovsky & Popeo, P.C ., One Financial Center, Boston, MA 02111, US

LAF English

LA English

DT Patent

PI WO 2002055702 A2 20020718

DS W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU  
CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS  
JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW  
MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TR  
TT TZ UA UG US UZ VN YU ZA ZW

RW (ARIPO): GH GM KE LS MW MZ SD SL SZ TZ UG ZW

RW (EAPO): AM AZ BY KG KZ MD RU TJ TM

RW (EPO): AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

RW (OAPI): BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

AI WO 2001-US50925 A 20011026

PRAI US 2000-60/243,642 20001026  
US 2000-60/243,320 20001026  
US 2000-60/243,592 20001026  
US 2000-60/243,681 20001027  
US 2000-60/243,863 20001027  
US 2000-60/244,443 20001031  
US 2000-60/245,029 20001101  
US 2000-60/244,995 20001101  
US 2000-60/245,293 20001102  
US 2000-60/245,315 20001102  
US 2000-60/245,316 20001102  
US 2001-60/262,994 20010119  
US 2001-60/269,056 20010215  
US 2001-60/272,923 20010302  
US 2001-60/276,565 20010315  
US 2001-60/318,119 20010907

ICM C12N015-12

ICS C07K014-47 ; C07K016-18 ; G01N033-53 ; C12Q001-68 ;  
G01N033-50 ;  
A61K039-395 ; A61K031-7088 ; A61K038-17

L3 ANSWER 34 OF 60 PCTFULL COPYRIGHT 2004 Univentio on STN

AN 2002050271 PCTFULL ED 20020709 EW 200226

TIEN NOVEL HUMAN **ION CHANNEL** PROTEIN AND POLYNUCLEOTIDES ENCODING THE SAME

TIFR NOUVELLE PROTEINE CANAL HUMAINE ET POLYNUCLEOTIDES CODANT POUR ELLE

IN FRIDDLE, Carl, Johan, 127 S. Goldenvine Circle, The Woodlands, TX 77382, US;  
HILBUN, Erin, 10901 Mist Line Apt. 2108, Houston, TX 77070, US;  
TURNER, C., Alexander, Jr., 67 Winter Wheat Place, The Woodlands, TX 77381, US

PA LEXICON GENETICS INCORPORATED, 4000 Research Forest Drive, The Woodlands, TX 77381, US [US, US]

AG ISHIMOTO, Lance, K., Lexicon Genetics Incorporated, 4000 Research Forest  
Drive, The Woodlands, TX 77381, US

LAF English

LA English

DT Patent

PI WO 2002050271 A2 20020627

DS W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU  
CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN  
IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN  
MW MX MZ NO NZ PH PL PT RO RU SD SE SG SI SK SL TJ TM TR  
TT TZ UA UG UZ VN YU ZA ZW

RW (ARIPO): GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

RW (EAPO): AM AZ BY KG KZ MD RU TJ TM

RW (EPO): AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

RW (OAPI): BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

AI WO 2001-US48050 A 20011210

PRAI US 2000-60/257,932 20001220

ICM C12N015-12

ICS C07K014-47

L3 ANSWER 35 OF 60 PCTFULL COPYRIGHT 2004 Univentio on STN

AN 2002046408 PCTFULL ED 20020624 EW 200224

TIEN **NOVEL HUMAN PROTEINS**, POLYNUCLEOTIDES  
ENCODING THEM AND METHODS OF USING THE SAME

TIFR NOUVELLES PROTEINES HUMAINES, POLYNUCLEOTIDES LES CODANT ET PROCEDES  
D'UTILISATION

IN LI, Li, 56 Jerimoth Drive, Branford, CT 06405, US [CN, US];  
FURTAK, Katarzyna, 31 Park Place, Ansonia, CT 06401, US [PL, US];  
PERNA, Amanda, 555 Long Wharf Drive, 11th Floor, New Haven, CT 06511, US  
[US, US];  
PATTURAJAN, Meera, 45 Harrison Avenue, Apartment 1C, Branford, CT 06405,  
US [IN, US];  
SHIMKETS, Richard, A., 191 Leete Street, West Haven, CT 06516, US [US,  
US];  
GUO, Xiaojia, 713 Robert Frost Drive, Branford, CT 06405, US [CN, US];  
CASMAN, Stacie, J., 17 Peck Street, North Haven, CT 06473, US [US, US];  
BURGESS, Catherine, E., 90 Carriage Hill Drive, Wethersfield, CT 06109,  
US [US, US];  
MALYANKAR, Uriel, M., 35 Averill Place, Branford, CT 06405, US [IN, US];  
TCHERNEV, Velizar, T., 45 Jefferson Road, #3-12, Branford, CT 06405, US  
[BG, US];  
VERNET, Corine, A., M., 1739 Foxon Road, North Branford, CT 06471, US  
[FR, US];  
SPYTEK, Kimberly, A., 28 Court Street, #1, New Haven, CT 06511, US [US,  
US];  
AGEE, Michele, 107 Knollwood Road, Wallingford, CT 06492, US [US, US];  
RASTELLI, Luca, 52 Pepperbush Lane, Guilford, CT 06437, US [IT, US];  
SHENOY, Suresh, G., 15 Millwood Drive, Branford, CT 06405, US [IN, US];  
GROSSE, William, M., 15 Rice Terrace Road, Apartment C, Branford, CT  
06405, US [US, US];  
ALSOBROOK, John, P., II, 60 Lake Drive, Madison, CT 06443, US [US, US];  
LEPLEY, Denise, M., 51 Church Street, Branford, CT 06405, US [US, US];  
GERLACH, Valerie, 18 Rock Pasture Road, Branford, CT 06405, US [US, US];  
EDINGER, Shlomit, 555 Long Wharf Drive, 11th Floor, New Haven, CT 06511,  
US [US, US];  
MACDOUGALL, John, R., 117 Russell Street, Hamden, CT 06517, US [CA, US];  
PEYMAN, John, A., 336 West Rock Avenue, New Haven, CT 06515, US [US,  
US];  
GUNTHER, Erik, 555 Long Wharf Drive, 11th Floor, New Haven, CT 06511, US  
[US, US];  
STONE, David, J., 223 Whitehorn Drive, Guilford, CT 06437, US [US, US];  
ELLERMAN, Karen, 87 Montoya Drive, Branford, CT 06405, US [US, US];  
GANGOLLI, Esha, A., 383 Walden Green, Branford, CT 06405, US [IN, US]

PA CURAGEN CORPORATION, 555 Long Wharf Drive, 11th floor, New Haven, CT



06511, US [US, US], for all designates States except US;  
 LI, Li, 56 Jerimoth Drive, Branford, CT 06405, US [CN, US], for US only;  
 FURTAK, Katarzyna, 31 Park Place, Ansonia, CT 06401, US [PL, US], for US only;  
 PERNA, Amanda, 555 Long Wharf Drive, 11th Floor, New Haven, CT 06511, US [US, US], for US only;  
 PATTURAJAN, Meera, 45 Harrison Avenue, Apartment 1C, Branford, CT 06405, US [IN, US], for US only;  
 SHIMKETS, Richard, A., 191 Leete Street, West Haven, CT 06516, US [US, US], for US only;  
 GUO, Xiaojia, 713 Robert Frost Drive, Branford, CT 06405, US [CN, US], for US only;  
 CASMAN, Stacie, J., 17 Peck Street, North Haven, CT 06473, US [US, US], for US only;  
 BURGESS, Catherine, E., 90 Carriage Hill Drive, Wethersfield, CT 06109, US [US, US], for US only;  
 MALYANKAR, Uriel, M., 35 Averill Place, Branford, CT 06405, US [IN, US], for US only;  
 TCHERNEV, Velizar, T., 45 Jefferson Road, #3-12, Branford, CT 06405, US [BG, US], for US only;  
 VERNET, Corine, A., M., 1739 Foxon Road, North Branford, CT 06471, US [FR, US], for US only;  
 SPYTEK, Kimberly, A., 28 Court Street, #1, New Haven, CT 06511, US [US, US], for US only;  
 AGEE, Michele, 107 Knollwood Road, Wallingford, CT 06492, US [US, US], for US only;  
 RASTELLI, Luca, 52 Pepperbush Lane, Guilford, CT 06437, US [IT, US], for US only;  
 SHENOY, Suresh, G., 15 Millwood Drive, Branford, CT 06405, US [IN, US], for US only;  
 GROSSE, William, M., 15 Rice Terrace Road, Apartment C, Branford, CT 06405, US [US, US], for US only;  
 ALSOBROOK, John, P., II, 60 Lake Drive, Madison, CT 06443, US [US, US], for US only;  
 LEPLEY, Denise, M., 51 Church Street, Branford, CT 06405, US [US, US], for US only;  
 GERLACH, Valerie, 18 Rock Pasture Road, Branford, CT 06405, US [US, US], for US only;  
 EDINGER, Shlomit, 555 Long Wharf Drive, 11th Floor, New Haven, CT 06511, US [US, US], for US only;  
 MACDOUGALL, John, R., 117 Russell Street, Hamden, CT 06517, US [CA, US], for US only;  
 PEYMAN, John, A., 336 West Rock Avenue, New Haven, CT 06515, US [US, US], for US only;  
 GUNTHER, Erik, 555 Long Wharf Drive, 11th Floor, New Haven, CT 06511, US [US, US], for US only;  
 STONE, David, J., 223 Whitehorn Drive, Guilford, CT 06437, US [US, US], for US only;  
 ELLERMAN, Karen, 87 Montoya Drive, Branford, CT 06405, US [US, US], for US only;  
 GANGOLLI, Esha, A., 383 Walden Green, Branford, CT 06405, US [IN, US], for US only

AG ELRIFI, Ivor, R., Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.,  
 One Financial Center, Boston, MA 02111, US  
 LAF English  
 LA English  
 DT Patent  
 PI WO 2002046408 A2 20020613  
 DS W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU  
 CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN  
 IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN  
 MW MX MZ NO NZ PH PL PT RO RU SD SE SG SI SK SL TJ TM TR  
 TT TZ UA UG US UZ VN YU ZA ZW  
 RW (ARIPO): GH GM KE LS MW MZ SD SL SZ TZ UG ZW

RW (EAPO): AM AZ BY KG KZ MD RU TJ TM  
 RW (EPO): AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
 RW (OAPI): BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

AI WO 2001-US46057 A 20011024  
 PRAI US 2000-60/242,882 20001024  
 US 2000-60/242,765 20001024  
 US 2000-60/242,768 20001024  
 US 2000-60/242,789 20001024  
 US 2000-60/242,767 20001024  
 US 2000-60/243,502 20001026  
 US 2000-60/243,622 20001026  
 US 2000-60/243,593 20001026  
 US 2000-60/243,591 20001026  
 US 2000-60/243,950 20001027  
 US 2001-60/273,047 20010302  
 US 2001-60/300,206 20010622  
 US 2001-60/316,509 20010831

ICM C12N015-12  
 ICS C12N005-10 ; C07K014-47 ; C07K016-18 ; C12Q001-68 ;  
 G01N033-577 ;  
 G01N033-68 ; A61K038-12 ; A61K039-395

L3 ANSWER 36 OF 60 PCTFULL COPYRIGHT 2004 Univentio on STN  
 AN 2002031150 PCTFULL ED 20020515 EW 200216  
 TIEN NOVEL HUMAN ION CHANNEL PROTEIN AND POLYNUCLEOTIDES  
 ENCODING THE SAME  
 TIFR NOUVELLE PROTEINE HUMAINE A CANAL IONIQUE ET POLYNUCLEOTIDES CODANT POUR  
 CELLE-CI  
 IN FRIDDLE, Carl, Johan, 127 S. Goldenvine Circle, The Woodlands, TX 77382,  
 US;  
 HILBUN, Erin, 16222 Stuebner Airline, Spring, TX 77379, US;  
 GERHARDT, Brenda, 2123 Knollbrook Lane, Spring, TX 77373, US;  
 TURNER, C., Alexander, Jr., 67 Winter Wheat Place, The Woodlands, TX  
 77381, US  
 PA LEXICON GENETICS INCORPORATED, 4000 Research Forest Drive, The  
 Woodlands, TX 77381, US [US, US]  
 AG ISHIMOTO, Lance, K., Lexicon Genetics Incorporated, 4000 Research Forest  
 Drive, The Woodlands, TX 77381, US  
 LAF English  
 LA English  
 DT Patent  
 PI WO 2002031150 A2 20020418  
 DS W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU  
 CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN  
 IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN  
 MW MX MZ NO NZ PH PL PT RO RU SD SE SG SI SK SL TJ TM TR  
 TT TZ UA UG UZ VN YU ZA ZW  
 RW (ARIPO): GH GM KE LS MW MZ SD SL SZ TZ UG ZW  
 RW (EAPO): AM AZ BY KG KZ MD RU TJ TM  
 RW (EPO): AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
 RW (OAPI): BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

AI WO 2001-US31900 A 20011010  
 PRAI US 2000-60/239,623 20001010  
 ICM C12N015-12  
 ICS C07K014-705 ; C12Q001-68 ; C07K016-28 ; C12N015-62 ;  
 G01N033-68 ;  
 A61K038-00 ; A61K048-00 ; A61K031-7088

L3 ANSWER 37 OF 60 PCTFULL COPYRIGHT 2004 Univentio on STN  
 AN 2002014498 PCTFULL ED 20020711 EW 200208  
 TIEN NOVEL HUMAN ION CHANNEL PROTEINS AND POLYNUCLEOTIDES  
 ENCODING THE SAME  
 TIFR NOUVELLES PROTEINES HUMAINES DE CANAL IONIQUE ET POLYNUCLEOTIDES CODANT  
 POUR CELLES-CI

IN TURNER, C., Alexander, Jr., 67 Winter Wheat Place, The Woodlands, TX  
77381, US;  
MATHUR, Brian, 12000 Sawmill Road #2014, The Woodlands, TX 77380, US;  
MATHUR, Daniel, 1071 Thorne Avenue, Wooster, OH 44691, US  
PA LEXICON GENETICS INCORPORATED, 4000 Research Forest Drive, The  
Woodlands, TX 77381, US [US, US]  
AG ISHIMOTO, Lance, K., Lexicon Genetics Incorporated, 4000 Research Forest  
Drive, The Woodlands, TX 77381, US  
LAF English  
LA English  
DT Patent  
PI WO 2002014498 A2 20020221  
DS W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU  
CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN  
IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN  
MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT  
TZ UA UG UZ VN YU ZA ZW  
RW (ARIPO): GH GM KE LS MW MZ SD SL SZ TZ UG ZW  
RW (EAPO): AM AZ BY KG KZ MD RU TJ TM  
RW (EPO): AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
RW (OAPI): BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
AI WO 2001-US25650 A 20010815  
PRAI US 2000-60/225,989 20000816  
ICM C12N015-00

L3 ANSWER 38 OF 60 PCTFULL COPYRIGHT 2004 Univentio on STN  
AN 2002010389 PCTFULL ED 20020814  
TIEN NOVEL HUMAN ION CHANNEL PROTEINS AND POLYNUCLEOTIDES  
ENCODING THE SAME  
TIFR NOUVELLES PROTEINES DU CANAL IONIQUE HUMAIN ET POLYNUCLEOTIDES CODANT  
CES DERNIERES

IN WALKER, D., Wade;  
MATHUR, Brian;  
TURNER, C., Alexander, Jr.;  
FRIDDLE, Carl, Johan;  
GERHARDT, Brenda

PA LEXICON GENETICS INCORPORATED  
DT Patent  
PI WO 2002010389 A2 20020207  
DS W:

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU  
CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN  
IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN  
MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT  
TZ UA UG UZ VN YU ZA ZW GH GM KE LS MW MZ SD SL SZ TZ UG  
ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR  
GB GR IE IT LU MC NL PT SE TR BF BJ CF CG CI CM GA GN GQ  
GW ML MR NE SN TD TG

AI WO 2001-US23827 A 20010730  
PRAI US 2000-60/221,643 20000728  
US 2000-60/222,503 20000802  
ICM C12N015-12  
ICS C07K014-705 ; C12Q001-68

L3 ANSWER 39 OF 60 PCTFULL COPYRIGHT 2004 Univentio on STN  
AN 2002007751 PCTFULL ED 20020814  
TIEN IDENTIFICATION AND ISOLATION OF NOVEL POLYPEPTIDES HAVING PDZ DOMAINS  
AND METHODS OF USING SAME  
TIFR IDENTIFICATION ET ISOLEMENT DE NOUVEAUX POLYPEPTIDES COMPORTANT DES  
DOMAINES PDZ ET LEURS METHODES D'UTILISATION

IN HERRERO, Juan;  
PIROZZI, Gregorio;  
UVEGES, Albert

PA AXCELL BIOSCIENCES CORPORATION  
DT Patent

PI WO 2002007751 A1 20020131  
 DS W: AU CA JP KR AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC  
 NL PT SE TR  
 AI WO 2001-US23269 A 20010724  
 PRAI US 2000-60/221,215 20000725  
 US 2000-09/723,810 20001128  
 ICM A61K038-06  
 ICS A61K038-16 ; C07K014-00 ; C12Q001-68 ; C12N005-10 ;  
 G01N033-48 ;  
 G01N033-53  
  
 L3 ANSWER 40 OF 60 PCTFULL COPYRIGHT 2004 Univentio on STN  
 AN 2001079294 PCTFULL ED 20020826  
 TIEN **NOVEL HUMAN PROTEINS, POLYNUCLEOTIDES**  
 ENCODING THEM AND METHODS OF USING THE SAME  
 TIFR NOUVELLES PROTEINES HUMAINES, POLYNUCLEOTIDES LES CODANT ET PROCEDES  
 PERMETTANT DE LES UTILISER  
 IN TAUPIER, Raymond, J., Jr.;  
 VERNET, Corine, A., M.;  
 FERNANDES, Elma;  
 SHIMKETS, Richard, A.;  
 MAJUMDER, Kumud;  
 PADIGARU, Muralidhara;  
 COLMAN, Steven, D.;  
 ZERHUSEN, Bryan, D.;  
 SPYTEK, Kimberly, A.;  
 BURGESS, Catherine, E.;  
 LIU, Xiaohong  
 PA CURAGEN CORPORATION;  
 TAUPIER, Raymond, J., Jr.;  
 VERNET, Corine, A., M.;  
 FERNANDES, Elma;  
 SHIMKETS, Richard, A.;  
 MAJUMDER, Kumud;  
 PADIGARU, Muralidhara;  
 COLMAN, Steven, D.;  
 ZERHUSEN, Bryan, D.;  
 SPYTEK, Kimberly, A.;  
 BURGESS, Catherine, E.;  
 LIU, Xiaohong  
 DT Patent  
 PI WO 2001079294 A2 20011025  
 DS W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU  
 CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS  
 JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW  
 MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ  
 UA UG US UZ VN YU ZA ZW GH GM KE LS MW MZ SD SL SZ TZ UG  
 ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR  
 GB GR IE IT LU MC NL PT SE TR BF BJ CF CG CI CM GA GN GW  
 ML MR NE SN TD TG  
 AI WO 2001-US12854 A 20010419  
 PRAI US 2000-60/198,293 20000419  
 US 2000-60/198,645 20000420  
 US 2000-60/199,476 20000425  
 US 2000-60/199,880 20000426  
 US 2000-60/200,024 20000426  
 US 2000-60/200,025 20000426  
 US 2000-60/210,809 20000609  
 US 2000-60/218,591 20000717  
 US 2000-60/224,610 20000811  
 US 2001-60/267,673 20010209  
 US 2001-60/271,814 20010227  
 ICM C07K014-705

L3 ANSWER 41 OF 60 PCTFULL COPYRIGHT 2004 Univentio on STN  
 AN 2001075108 PCTFULL ED 20020822  
 TIEN HUMAN ION CHANNEL PROTEIN AND POLYNUCLEOTIDES  
 ENCODING THE SAME  
 TIFR PROTEINE HUMAINE DU CANAL IONIQUE ET POLYNUCLEOTIDES LA CODANT  
 IN HU, Yi;  
 KIEKE, James, Alvin;  
 TURNER, Alexander, C., Jr.;  
 NEHLS, Michael, C.;  
 FRIEDRICH, Glenn;  
 ZAMBROWICZ, Brian;  
 SANDS, Arthur, T.  
 PA LEXICON GENETICS INCORPORATED  
 DT Patent  
 PI WO 2001075108 A1 20011011  
 DS W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ  
 DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP  
 KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX  
 MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA  
 UG UZ VN YU ZA ZW GH GM KE LS MW MZ SD SL SZ TZ UG ZW AM  
 AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR  
 IE IT LU MC NL PT SE TR BF BJ CF CG CI CM GA GN GW ML MR  
 NE SN TD TG  
 AI WO 2001-US10875 A 20010403  
 PRAI US 2000-60/194,255 20000403  
 ICM C12N015-12  
 ICS C07K014-705

L3 ANSWER 42 OF 60 PCTFULL COPYRIGHT 2004 Univentio on STN  
 AN 2001074896 PCTFULL ED 20020822  
 TIEN HUMAN POLYNUCLEOTIDES, POLYPEPTIDES, AND ANTIBODIES  
 TIFR POLYNUCLEOTIDES, POLYPEPTIDES ET ANTICORPS HUMAINS  
 IN MOORE, Paul, A.;  
 NI, Jian;  
 SOPPET, Daniel, R.;  
 COLEMAN, Timothy, A.;  
 GENTZ, Reiner, L.;  
 ENDRESS, Gregory, A.;  
 LI, Yi;  
 DILLON, Patrick, J.  
 PA HUMAN GENOME SCIENCES, INC.;  
 MOORE, Paul, A.;  
 NI, Jian;  
 SOPPET, Daniel, R.;  
 COLEMAN, Timothy, A.;  
 GENTZ, Reiner, L.;  
 ENDRESS, Gregory, A.;  
 LI, Yi;  
 DILLON, Patrick, J.  
 DT Patent  
 PI WO 2001074896 A1 20011011  
 DS W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU  
 CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS  
 JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW  
 MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ  
 UA UG US UZ VN YU ZA ZW GH GM KE LS MW MZ SD SL SZ TZ UG  
 ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR  
 GB GR IE IT LU MC NL PT SE TR BF BJ CF CG CI CM GA GN GW  
 ML MR NE SN TD TG  
 AI WO 2001-US10542 A 20010402  
 PRAI US 2000-60/194,118 20000403  
 US 2000-60/236,384 20000929  
 ICM C07K014-47  
 ICS C12N005-10 ; C12N005-16 ; C12N015-12 ; C12N015-63 ;

C12N015-64

L3 ANSWER 43 OF 60 PCTFULL COPYRIGHT 2004 Univentio on STN  
AN 2001062789 PCTFULL ED 20020822  
TIEN HUMAN POLYNUCLEOTIDES, POLYPEPTIDES, AND ANTIBODIES  
TIFR POLYNUCLEOTIDES, POLYPEPTIDES ET ANTICORPS HUMAINS  
IN NI, Jian;  
SHI, Yanggu;  
EBNER, Reinhard;  
CHOI, Gil, H.;  
RUBEN, Steven, M.  
PA HUMAN GENOME SCIENCES, INC.;  
NI, Jian;  
SHI, Yanggu;  
EBNER, Reinhard;  
CHOI, Gil, H.;  
RUBEN, Steven, M.  
DT Patent  
PI WO 2001062789 A1 20010830  
DS W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ  
DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP  
KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX  
MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA  
UG US UZ VN YU ZA ZW GH GM KE LS MW MZ SD SL SZ TZ UG ZW  
AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB  
GR IE IT LU MC NL PT SE TR BF BJ CF CG CI CM GA GN GW ML  
MR NE SN TD TG  
AI WO 2001-US5498 A 20010222  
PRAI US 2000-60/184,664 20000224  
US 2000-60/189,874 20000316  
ICM C07K014-47  
ICS C12N005-10 ; C12N005-16 ; C12N015-12 ; C12N015-63 ;  
C12N015-64

L3 ANSWER 44 OF 60 PCTFULL COPYRIGHT 2004 Univentio on STN  
AN 2001053343 PCTFULL ED 20020827  
TIEN HUMAN POLYNUCLEOTIDES, POLYPEPTIDES, AND ANTIBODIES  
TIFR POLYNUCLEOTIDES, POLYPEPTIDES ET ANTICORPS HUMAINS  
IN RUBEN, Steven, M.;  
SHI, Yanggu  
PA HUMAN GENOME SCIENCES, INC.;  
RUBEN, Steven, M.;  
SHI, Yanggu  
DT Patent  
PI WO 2001053343 A1 20010726  
DS W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ  
DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP  
KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX  
MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA  
UG US UZ VN YU ZA ZW GH GM KE LS MW MZ SD SL SZ TZ UG ZW  
AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB  
GR IE IT LU MC NL PT SE TR BF BJ CF CG CI CM GA GN GW ML  
MR NE SN TD TG  
AI WO 2001-US1436 A 20010117  
PRAI US 2000-60/176,307 20000118  
ICM C07K014-47  
ICS C12N005-10 ; C12N015-12 ; C12N015-1 ; C12N015-19 ;  
C12N015-63 ;  
C12N015-64

L3 ANSWER 45 OF 60 PCTFULL COPYRIGHT 2004 Univentio on STN  
AN 2001049728 PCTFULL ED 20020827  
TIEN HUMAN PROTEINS HAVING HYDROPHOBIC DOMAINS AND DNAs ENCODING THESE  
PROTEINS

TIFR PROTEINES HUMAINES A DOMAINES HYDROPHOBES ET ADN CODANT CES PROTEINES  
IN KATO, Seishi;  
KIMURA, Tomoko  
PA PROTEGENE INC.;  
SAGAMI CHEMICAL RESEARCH CENTER;  
KATO, Seishi;  
KIMURA, Tomoko  
DT Patent  
PI WO 2001049728 A2 20010712  
DS W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ  
DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP  
KE KG KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ  
NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG  
US UZ VN YU ZA ZW GH GM KE LS MW MZ SD SL SZ TZ UG ZW AM  
AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR  
IE IT LU MC NL PT SE TR BF BJ CF CG CI CM GA GN GW ML MR  
NE SN TD TG

AI WO 2000-JP9359 A 20001228  
PRAI JP 2000-2000-585 20000106  
JP 2000-2000-588 20000106  
JP 2000-2000-2299 20000111  
JP 2000-2000-26862 20000203  
JP 2000-2000-58367 20000303

ICM C12N015-12  
ICS C07K014-47 ; C07K016-18

L3 ANSWER 46 OF 60 PCTFULL COPYRIGHT 2004 Univentio on STN  
AN 2001012660 PCTFULL ED 20020828  
TIEN HUMAN PROTEINS HAVING HYDROPHOBIC DOMAINS AND DNAs ENCODING THESE  
PROTEINS

TIFR PROTEINES HUMAINES A DOMAINES HYDROPHOBES ET ADN CODANT POUR CES  
PROTEINES  
IN KATO, Seishi;  
KIMURA, Tomoko  
PA SAGAMI CHEMICAL RESEARCH CENTER;  
PROTEGENE INC.;  
KATO, Seishi;  
KIMURA, Tomoko  
DT Patent

PI WO 2001012660 A2 20010222  
DS W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ  
DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP  
KE KG KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ  
NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG  
US UZ VN YU ZA ZW GH GM KE LS MW MZ SD SL SZ TZ UG ZW AM  
AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR  
IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML MR NE  
SN TD TG

AI WO 2000-JP5356 A 20000810  
PRAI JP 1999-11/230344 19990817  
JP 1999-11/252551 19990907  
JP 1999-11/281132 19991001  
JP 1999-11/301624 19991022  
JP 1999-11/313877 19991104

ICM C07K014-00

L3 ANSWER 47 OF 60 PCTFULL COPYRIGHT 2004 Univentio on STN  
AN 2001002563 PCTFULL ED 20020828  
TIEN HUMAN PROTEINS HAVING HYDROPHOBIC DOMAINS AND DNAs ENCODING THESE  
PROTEINS  
TIFR PROTEINES HUMAINES AYANT DES DOMAINES HYDROPHOBES ET ADN CODANT POUR CES  
PROTEINES  
IN KATO, Seishi;  
KIMURA, Tomoko

PA SAGAMI CHEMICAL RESEARCH CENTER;  
PROTEGENE INC.;  
KATO, Seishi;  
KIMURA, Tomoko

DT Patent

PI WO 2001002563 A2 20010111

DS W: AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE  
DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE  
KG KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO  
NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US  
UZ VN YU ZA ZW GH GM KE LS MW MZ SD SL SZ TZ UG ZW AM AZ  
BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE  
IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN  
TD TG

AI WO 2000-JP3943 A 20000616

PRAI JP 1999-11/188835 19990702

ICM C12N015-12

ICS C07K014-705 ; C07K014-47 ; C07K016-18 ; C07K016-28

L3 ANSWER 48 OF 60 PCTFULL COPYRIGHT 2004 Univentio on STN

AN 2001000824 PCTFULL ED 20020828

TIEN HUMAN PROTEINS HAVING HYDROPHOBIC DOMAINS AND DNAs ENCODING THESE  
PROTEINS

TIFR PROTEINES HUMAINES A DOMAINES HYDROPHOBES ET ADNs LES CODANT

IN KATO, Seishi;  
KIMURA, Tomoko

PA SAGAMI CHEMICAL RESEARCH CENTER;  
PROTEGENE INC.;  
KATO, Seishi;  
KIMURA, Tomoko

DT Patent

PI WO 2001000824 A2 20010104

DS W: AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE  
DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE  
KG KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO  
NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US  
UZ VN YU ZA ZW GH GM KE LS MW MZ SD SL SZ TZ UG ZW AM AZ  
BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE  
IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN  
TD TG

AI WO 2000-JP3944 A 20000616

PRAI JP 1999-11/178065 19990624

ICM C12N015-12

ICS C07K014-705 ; C07K014-47 ; C07K016-18 ; C07K016-28

L3 ANSWER 49 OF 60 PCTFULL COPYRIGHT 2004 Univentio on STN

AN 2000056751 PCTFULL ED 20020515

TIEN 50 HUMAN SECRETED PROTEINS

TIFR CINQUANTE PROTEINES HUMAINES SECRETEES

IN ROSEN, Craig, A.;  
RUBEN, Steven, M.;  
KOMATSOULIS, George

PA HUMAN GENOME SCIENCES, INC.;  
ROSEN, Craig, A.;  
RUBEN, Steven, M.;  
KOMATSOULIS, George

LA English

DT Patent

PI WO 2000056751 A1 20000928

DS W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES  
FI GB GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK  
LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE  
SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW GH GM KE LS  
MW SD SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH



		CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG
		CI CM GA GN GW ML MR NE SN TD TG
AI	WO 2000-US6013	A 20000309
PRAI	US 1999-60/125,360	19990319
	US 1999-60/138,626	19990611
	US 1999-60/168,662	19991203
ICM	C07H021-04	
ICS	C07K014-00 ; C07K016-00 ; C12N015-00 ; C12N015-63 ;	
	C12N015-85 ;	
	C12N015-86 ; C12Q001-68 ; G01N033-53	
L3	ANSWER 50 OF 60 PCTFULL COPYRIGHT 2004 Univentio on STN	
AN	2000029448 PCTFULL ED 20020515	
TIEN	HUMAN PROTEINS HAVING HYDROPHOBIC DOMAINS AND DNAS ENCODING THESE PROTEINS	
TIFR	PROTEINES HUMAINES A DOMAINES HYDROPHOBES ET ADN CODANT POUR CES PROTEINES	
IN	KATO, Seishi;	
	KIMURA, Tomoko	
PA	SAGAMI CHEMICAL RESEARCH CENTER;	
	PROTEGENE INC.;	
	KATO, Seishi;	
	KIMURA, Tomoko	
LA	English	
DT	Patent	
PI	WO 2000029448	A2 20000525
DS	W:	AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK
		DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KR
		KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT
		RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU
		ZA ZW GH GM KE LS MW SD SL SZ TZ UG ZW AM AZ BY KG KZ MD
		RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL
		PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
AI	WO 1999-JP6412	A 19991117
PRAI	JP 1998-10/326255	19981117
	JP 1998-10/364315	19981222
	JP 1999-11/69811	19990316
	JP 1999-11/119299	19990427
	JP 1999-11/138169	19990519
ICM	C07R014-705	
ICS	C12N015-12	
L3	ANSWER 51 OF 60 PCTFULL COPYRIGHT 2004 Univentio on STN	
AN	2000005367 PCTFULL ED 20020515	
TIEN	HUMAN PROTEINS HAVING HYDROPHOBIC DOMAINS AND DNAS ENCODING THESE PROTEINS	
TIFR	PROTEINES HUMAINES A DOMAINES HYDROPHOBES ET ADN CODANT POUR CES PROTEINES	
IN	KATO, Seishi;	
	KIMURA, Tomoko	
PA	SAGAMI CHEMICAL RESEARCH CENTER;	
	PROTEGENE INC.;	
	KATO, Seishi;	
	KIMURA, Tomoko	
LA	English	
DT	Patent	
PI	WO 2000005367	A2 20000203
DS	W:	AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE
		ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KR KZ LC
		LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD
		SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZA ZW GH GM
		KE LS MW SD SL SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE
		CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF
		CG CI CM GA GN GW ML MR NE SN TD TG

AI WO 1999-JP3929 A 19990722  
 PRAI JP 1998-10/208820 19980724  
 JP 1998-10/224105 19980807  
 JP 1998-10/238116 19980825  
 JP 1998-10/254736 19980909  
 JP 1998-10/275505 19980929  
 ICM C12N015-12  
 ICS C07K014-705 ; C12N005-10

L3 ANSWER 52 OF 60 PCTFULL COPYRIGHT 2004 Univentio on STN  
 AN 2000000506 PCTFULL ED 20020515  
 TIEN HUMAN PROTEINS HAVING HYDROPHOBIC DOMAINS AND DNAs ENCODING THESE  
 PROTEINS  
 TIFR PROTEINES HUMAINES POSSEDANT DES DOMAINES HYDROPHOBES ET ADN CODANT CES  
 PROTEINES  
 IN KATO, Seishi;  
 KIMURA, Tomoko  
 PA SAGAMI CHEMICAL RESEARCH CENTER;  
 PROTEGENE INC.;  
 KATO, Seishi;  
 KIMURA, Tomoko  
 LA English  
 DT Patent  
 PI WO 2000000506 A2 20000106  
 DS W: AU CA JP MX US AT BE CH CY DE DK ES FI FR GB GR IE IT LU  
 MC NL PT SE

AI WO 1999-JP3242 A 19990618  
 PRAI JP 1998-10/180008 19980626  
 ICM C12N015-12  
 ICS C07K014-705 ; C12N005-10

L3 ANSWER 53 OF 60 PCTFULL COPYRIGHT 2004 Univentio on STN  
 AN 1999055862 PCTFULL ED 20020515  
 TIEN HUMAN PROTEINS HAVING TRANSMEMBRANE DOMAINS AND DNAs ENCODING THESE  
 PROTEINS  
 TIFR PROTEINES HUMAINES COMPORTANT DES DOMAINES TRANSMEMBRANAIRES ET  
 SEQUENCES D'ADN CODANT CES PROTEINES  
 IN KATO, Seishi;  
 KIMURA, Tomoko  
 PA SAGAMI CHEMICAL RESEARCH CENTER;  
 PROTEGENE INC.;  
 KATO, Seishi;  
 KIMURA, Tomoko  
 LA English  
 DT Patent  
 PI WO 9955862 A2 19991104  
 DS W: AU CA JP MX US AT BE CH CY DE DK ES FI FR GB GR IE IT LU  
 MC NL PT SE

AI WO 1999-JP2226 A 19990427  
 PRAI JP 1998-10/119395 19980428  
 ICM C12N015-12  
 ICS C07K014-47 ; C12N005-10

L3 ANSWER 54 OF 60 PCTFULL COPYRIGHT 2004 Univentio on STN  
 AN 1999043802 PCTFULL ED 20020515  
 TIEN HUMAN PROTEINS HAVING TRANSMEMBRANE DOMAINS AND DNAs ENCODING THESE  
 PROTEINS  
 TIFR PROTEINES HUMAINES POSSEDANT DES DOMAINES TRANSMEMBRANAIRES ET ADN  
 CODANT CES PROTEINES  
 IN KATO, Seishi;  
 SEKINE, Shingo;  
 KIMURA, Tomoko;  
 NAKAMURA, Nobuko  
 PA SAGAMI CHEMICAL RESEARCH CENTER;

PROTEGENE INC.;  
 KATO, Seishi;  
 SEKINE, Shingo;  
 KIMURA, Tomoko;  
 NAKAMURA, Nobuko  
 LA English  
 DT Patent  
 PI WO 9943802 A2 19990902  
 DS W: AU CA JP MX US AT BE CH CY DE DK ES FI FR GB GR IE IT LU  
 MC NL PT SE  
 AI WO 1999-JP875 A 19990225  
 PRAI JP 1998-10/46607 19980227  
 ICM C12N015-12  
 ICS C12N005-10 ; C07K014-705  
  
 L3 ANSWER 55 OF 60 PCTFULL COPYRIGHT 2004 Univentio on STN  
 AN 1999027094 PCTFULL ED 20020515  
 TIEN HUMAN PROTEINS HAVING TRANSMEMBRANE DOMAINS AND DNAs ENCODING THESE  
 PROTEINS  
 TIFR PROTEINES HUMAINES PRESENTANT DES DOMAINES MEMBRANAIRES ET ADN CODANT  
 CES PROTEINES  
 IN KATO, Seishi;  
 KIMURA, Tomoko;  
 SEKINE, Shingo  
 PA SAGAMI CHEMICAL RESEARCH CENTER;  
 PROTEGENE INC.;  
 KATO, Seishi;  
 KIMURA, Tomoko;  
 SEKINE, Shingo  
 LA English  
 DT Patent  
 PI WO 9927094 A2 19990603  
 DS W: AU CA JP MX US AT BE CH CY DE DK ES FI FR GB GR IE IT LU  
 MC NL PT SE  
 AI WO 1998-JP5238 A 19981120  
 PRAI JP 1997-9/323129 19971125  
 ICM C12N015-12  
 ICS C07K014-47 ; C12N015-85 ; C12N005-10  
  
 L3 ANSWER 56 OF 60 PCTFULL COPYRIGHT 2004 Univentio on STN  
 AN 1999018203 PCTFULL ED 20020515  
 TIEN HUMAN PROTEINS HAVING TRANSMEMBRANE DOMAINS AND cDNAs ENCODING THESE  
 PROTEINS  
 TIFR PROTEINES HUMAINES COMPORTANT DES DOMAINES TRANSMEMBRANAIRES ET ADN  
 CODANT CES PROTEINES  
 IN KATO, Seishi;  
 KIMURA, Tomoko;  
 SEKINE, Shingo;  
 KOBAYASHI, Midori  
 PA SAGAMI CHEMICAL RESEARCH CENTER;  
 PROTEGENE INC.;  
 KATO, Seishi;  
 KIMURA, Tomoko;  
 SEKINE, Shingo;  
 KOBAYASHI, Midori  
 LA English  
 DT Patent  
 PI WO 9918203 A2 19990415  
 DS W: AU CA JP MX US AT BE CH CY DE DK ES FI FR GB GR IE IT LU  
 MC NL PT SE  
 AI WO 1998-JP4475 A 19981005  
 PRAI JP 1997-9/276271 19971008  
 ICM C12N015-12  
 ICS C07K014-47 ; C12N015-79 ; C12N005-10

L3 ANSWER 57 OF 60 PCTFULL COPYRIGHT 2004 Univentio on STN  
 AN 1999018202 PCTFULL ED 20020515  
 TIEN HUMAN PROTEINS HAVING TRANSMEMBRANE DOMAINS AND cDNAs ENCODING THESE  
 PROTEINS  
 TIFR PROTEINES HUMAINES COMPORTANT DES DOMAINES TRANSMEMBRANAIRES ET ADN  
 CODANT CES PROTEINES  
 IN KATO, Seishi;  
 SEKINE, Shingo  
 PA SAGAMI CHEMICAL RESEARCH CENTER;  
 PROTEGENE INC.;  
 KATO, Seishi;  
 SEKINE, Shingo  
 LA English  
 DT Patent  
 PI WO 9918202 A2 19990415  
 DS W: AU CA JP MX US AT BE CH CY DE DK ES FI FR GB GR IE IT LU  
 MC NL PT SE  
 AI WO 1998-JP4474 A 19981005  
 PRAI JP 1997-9/276269 19971008  
 ICM C12N015-12  
 ICS C07K014-705 ; C12N005-10

L3 ANSWER 58 OF 60 PCTFULL COPYRIGHT 2004 Univentio on STN  
 AN 1999018199 PCTFULL ED 20020515  
 TIEN cDNAs CODING FOR HUMAN PROTEINS HAVING TRANSMEMBRANE DOMAINS  
 TIFR ADNc CODANT POUR DES PROTEINES HUMAINES POSSEDANT DES DOMAINES  
 TRANSMEMBRANAIRES  
 IN KATO, Seishi;  
 SEKINE, Shingo  
 PA SAGAMI CHEMICAL RESEARCH CENTER;  
 PROTEGENE INC.;  
 KATO, Seishi;  
 SEKINE, Shingo  
 LA English  
 DT Patent  
 PI WO 9918199 A2 19990415  
 DS W: AU CA JP MX US AT BE CH CY DE DK ES FI FR GB GR IE IT LU  
 MC NL PT SE  
 AI WO 1998-JP4447 A 19981002  
 PRAI JP 1997-9/276270 19971008  
 ICM C12N015-12  
 ICS C07K014-705 ; C12N005-10

L3 ANSWER 59 OF 60 PCTFULL COPYRIGHT 2004 Univentio on STN  
 AN 1998055508 PCTFULL ED 20020514  
 TIEN HUMAN PROTEINS HAVING TRANSMEMBRANE DOMAINS AND DNAs ENCODING THESE  
 PROTEINS  
 TIFR PROTEINES HUMAINES AYANT DES DOMAINES TRANSMEMBRANAIRES ET ADN CODANT  
 CES PROTEINES  
 IN KATO, Seishi;  
 SEKINE, Shingo;  
 YAMAGUCHI, Tomoko  
 PA SAGAMI CHEMICAL RESEARCH CENTER;  
 PROTEGENE INC.;  
 KATO, Seishi;  
 SEKINE, Shingo;  
 YAMAGUCHI, Tomoko  
 LA English  
 DT Patent  
 PI WO 9855508 A2 19981210  
 DS W: AU CA JP MX US AT BE CH CY DE DK ES FI FR GB GR IE IT LU  
 MC NL PT SE  
 AI WO 1998-JP2445 A 19980603

PRAI JP 1997-9/144948 19970603  
 ICM C12N015-12  
 ICS C07K014-705 ; A61K038-17 ; C12N005-10 ; C12Q001-37 ;  
 C12N009-72 ;  
 C12N015-85  
  
 L3 ANSWER 60 OF 60 PCTFULL COPYRIGHT 2004 Univentio on STN  
 AN 1998021328 PCTFULL ED 20020514  
 TIEN HUMAN PROTEINS HAVING TRANSMEMBRANE DOMAINS AND DNAS ENCODING THESE  
 PROTEINS  
 TIFR PROTEINES HUMAINES POSSEDANT DES DOMAINES DE TRANSMEMBRANE ET ADN CODANT  
 CES PROTEINES  
 IN KATO, Seishi;  
 SEKINE, Shingo;  
 YAMAGUCHI, Tomoko;  
 KOBAYASHI, Midori  
 PA SAGAMI CHEMICAL RESEARCH CENTER;  
 PROTEGENE INC.;  
 KATO, Seishi;  
 SEKINE, Shingo;  
 YAMAGUCHI, Tomoko;  
 KOBAYASHI, Midori  
 LA English  
 DT Patent  
 PI WO 9821328 A2 19980522  
 DS W: AU CA JP MX US AT BE CH DE DK ES FI FR GB GR IE IT LU MC  
 NL PT SE  
 AI WO 1997-JP4056 A 19971107  
 PRAI JP 1996-8/301429 19961113  
 ICM C12N015-12  
 ICS C07K014:705 ; C12N005:10 ; C12N015:57 ; C12N009:48 ;  
 C12N009:14 ;  
 C12N015:55